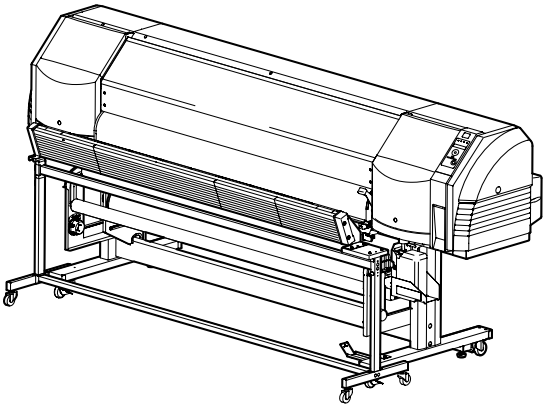
SII

User's Guide U00114186304

Solvent Ink Color Inkjet Printer

IP-5610



Read this User's Guide before operating the printer.
Save this manual for future reference.

Seiko I Infotech Inc.

IP-5610 Solvent Ink Color Inkjet Printer User's Guide
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This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

CE

The CE mark, that shows that the products sold in the EU are conformed to the requirements of EC directive, is statutorily obliged to be affixed to the products.
In each directive, the scope of directive to be applied to equipment is explicitly defined. Our company's product IP-5610 conforms the EMC directive (2004/108/EC)) and low voltage directive (2006/95/EC).

Inquiry of CE mark:

Seiko Instruments GmbH
Siemensstraße 9, D-63263 Neu-Isenburg
Germany
Tel: +49-6102-297-0
Fax: +49-6102-297-320

Seiko I Infotech Inc.
8 Nakase 1-chome, Mihama-ku, Chiba-shi, Chiba 261-8507, Japan
Phone : +81 43 211 1363
Fax : +81 43 211 8709

Introduction

Thank you very much for purchasing the IP-5610 Color Inkjet Printer (hereafter simply called the printer below.)

The printer is a color inkjet printer equipped with built-in USB interface that adopts the dye-sublimation transfer printing ink and supports the media of up to 64 inch width.

This guide, the **IP-5610 Solvent ink Color Inkjet Printer User's Guide**, describes such information for use as features and functions of the printer and the printing procedure. In addition, troubleshooting is also described.
Read sections suitable for your purpose.

The following items should be read before reading Section 1.

- Components delivered with this product
- Safety precautions
- Handling precautions
- Manual legend (notational rules)

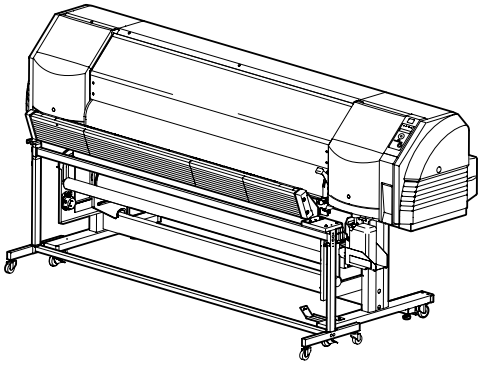
Read these items to use the printer safely and properly. Keep this manual in a place where you can quickly access it at any time.

Components delivered with this product

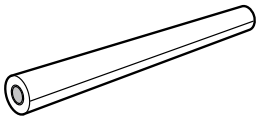
The following components are delivered with the product.
If any item is missing or damaged, contact your dealer where the printer was purchased.

Basic configuration item

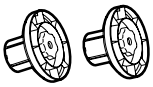
Printer <1 unit>
- equipped with USB interface
- mounted with the take-up reel unit



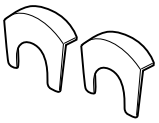
Supplied Accessories



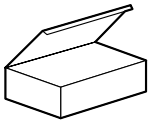
Roll Media (For adjustment)
<1 piece>



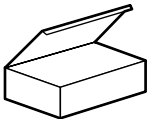
3 inch flange
<2 pieces>



Flange spacer
<2 pieces>

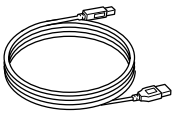


Print head set
<1 set>

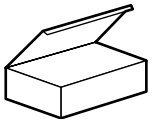


Ink cartridge set
6 colors (Y, M, C, K, Lc, Lm)
<1 set>

Power cable
<1 piece>

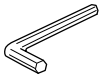


USB2.0 cable
<1 piece>

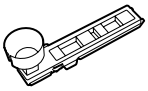


Daily maintenance kit
<1 set>
- Cap Cleaning Liquid : 300 ml / 1PC
- Wiper Cleaning Liquid : 200 ml / 3PCS
- Cleaning Swab : 10 pieces
- Cap Cleaning stick : 1 piece
- Cap Cleaning roller : 30 pieces
- Tweezers : 1 piece
- Wiper blade : 1 piece

Media cutter blade
<1 piece>



Hex wrench
<1 piece>



Wiper sponge
<1 piece>

Spanner
<1 piece>

Phillips screwdriver
<1 piece>

Waste ink bottle
<1 bottle>

User's Guide
<1 volume, This guide>

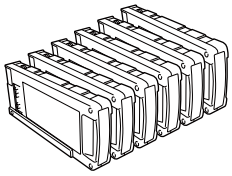
Troubleshooting Guide
<1 volume>

- Ink is consumed during the initial filling when the printer is installed. Therefore, all of ink may not be used for printing.

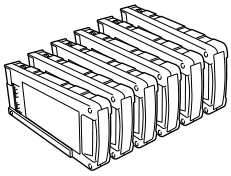
Options

- 3 inch flange (IP-151) : 1
- 2 inch flange (IP-152) : 1
- Exhaust attachment (IP-265) : 1
- Blower unit (IP-182) : 1

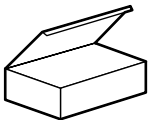
Consumables



Cleaning liquid cartridge set (IP5-138 or IP5-714)
<1 set>
- Cleaning liquid cartridge : 6 pieces

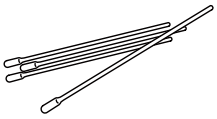


Storage liquid cartridge set (IP5-107 or IP5-713)
<1 set>
- Storage liquid cartridge : 6 pieces



Daily maintenance kit (IP5-230 or IP5-710)
<1 set>
- Cap Cleaning Liquid : 300 ml / 1PC
- Wiper Cleaning Liquid : 200 ml / 3PCS
- Cleaning Swab : 10 pieces
- Cap Cleaning stick : 1 piece
- Cap Cleaning roller : 30 pieces
- Tweezers : 1 piece
- Wiper blade : 1 piece

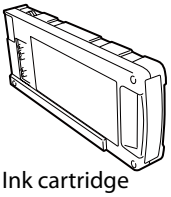
Wiper cleaning liquid set (IP5-231 or IP5-712)
<1 set>
- Wiper cleaning liquid (200 ml) : 3 bottles



Cleaning swab
(IP6-147)
<300 pieces>

Waste ink bottle
(IP5-139 or IP5-109)
<1 piece>

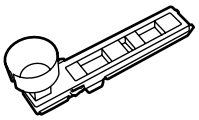
Media cutter blade
(IP5-124)
<1 piece>



Ink cartridge
(Y, M, C, K, Lc, Lm)
→ As to types, refer to P.1-12.

Wiper blade
(IP5-122)
<2 pieces>

Cap cleaning liquid set (IP5-136)
<1 set>



Wiper sponge (IP5-123)
<1 piece>

Cap cleaning roller set
(IP5-147)
<30 pieces>

Cap cleaning stick
(IP5-120)
<1 piece>
(1 piece of cap cleaning roller is supplied.)

* Options and consumables can be ordered separately.

Safety precautions

The following symbols are used in this manual to ensure the proper use of the printer and to prevent the printer from being damaged.

Follow the instructions marked with these symbols.

⚠WARNING	Serious personal injury or death : Failure to follow the guidelines marked with this symbol could result in serious personal injury or death.
⚠CAUTION	Minor personal injury or product and / or peripheral damage : Failure to follow the guidelines marked with this symbol could result in minor personal injury or product and / or peripheral damage.

Example of symbols :

This symbol (△) denotes items that require special care while executing a certain procedure or operation.

This symbol (⃠) denotes items that are forbidden.

This symbol (●) denotes items you should follow to prevent accidents or injury.

⚠ WARNING Ensure to read cautions below before use.

	Use the power supply voltage specified on the nameplate. DO NOT plug several devices into one electrical outlet as this might result in fire or electric shock.
	Make sure the printer is well grounded. If not, a short circuit may cause fire or electrical shock.
	DO NOT disassemble or remodel the printer. DO NOT repair the printer yourself. Doing so may cause fire, electric shock or personal injury.
	DO NOT damage, break, process, or heat the power cable. If it is damaged, replace it with a new one. Using a damaged power cable may cause fire or electric shock.
	NEVER use the printer in a place of extreme humidity or any place where it can possibly be splashed by any liquids. If any liquids get into the printer, it could lead to fire, electric shock, or personal injury.
	DO NOT remove the covers attached to the printer because they contain high-voltage and extremely hot parts. Doing so may might result in an electric shock or burn.
	DO NOT allow metal or liquids to touch the internal parts of the printer. Doing so may cause fire, electric shock, or personal injury.
	DO NOT disconnect or connect the power cable with wet hands. Doing so may lead to electric shock.
	Turn the printer off and unplug the power cable immediately after it thundered.
	Power OFF the printer and unplug the power cable from the power outlet in any of the following cases : - When putting your hands inside the printer. - Smoke, strange noise or smells generate from the printer. - A piece of metal or any liquid touches the internal parts or slot of the printer. - An error requiring service by a service center occurs.
	DO NOT put your hand unnecessarily inside the printer such as covers, ventilator opening and ink cartridge slot. Doing so may result in personal injury. Even if the printer is not operating, it may perform a function automatically. Use caution with the printer even if it is not printing.

	The ink used for the device contains petroleum solvent (Iso Alkanes (C13-16)), Since the ink is flammable, never operate near open flame.
	DO NOT swallow ink and avoid contact with eyes. It will cause respiratory distress and can harm the eyes. If it gets into the eyes, rinse with clean water and consult a doctor immediately. If swallowed, do not try to induce vomiting. Consult a doctor immediately.
	Keep accessories and consumables such as ink cartridges and Media cutter blades out of reach of children.
	If the printer is stained with ink, wipe the ink off the printer immediately. If left as stained, parts may be broken or paints may come off.

⚠ CAUTION Ensure to read cautions below before use.

	Since the media rolls are heavy, handle them with care. If dropped, personal injury may result.
	Always hold the power cable or the USB cable by the plug or the connector when connecting or disconnecting the power cable or the USB cable. Never pull on the cable because this may damage it and create risk of fire, electric shock or personal injury.
	DO NOT get ink on your skin or clothes. Wash off any ink immediately with soapy water.
	DO NOT place media rolls on tables or unlevel areas where it could fall. If dropped or falls, it may lead to injury. To prevent falling, lock the casters.

In order to ensure the safe operation of the printer, note all of the cautions and warnings contained throughout this manual.

Handling precautions

Power supply

1. Install the printer near an easily accessible electrical outlet.
2. Do not provide power to the printer through the same power line as for noise-generating devices, such as a motor.
3. Use the voltage specified on the nameplates of printer and option.
4. Connect one power cable to an electrical outlet. Do not plug several devices into one electrical outlet.

Printer

1. Do not place anything on top of the printer. Do not rest your elbows on the printer.
   Handle it with care. Do not do anything that will result in impact to the printer.
2. When opening or closing the cover, hold the center of the cover by both hands and open or close it gently.
3. Before connecting or disconnecting the interface connector, turn the printer off.
4. Do not clean the surface of the cover with benzene or paint thinner. The coating may come off or deteriorate.
   Wipe the cover clean with a soft cloth. If the cover is very dirty, use a cloth moistened with a neutral detergent.
5. Handle a Print head with care.
   - Do not touch it unnecessarily or scratch it.
   - Do not touch the bottom (nozzle surface).

Regular inspection and maintenance

As the intrinsic characteristics of dye-sublimation transfer printing ink necessitates it, the following regular inspection and maintenance must be performed

1. Clean the Capping unit every week.
2. Check visually the remaining wiper cleaning liquid everyday.
3. Perform the Print head cleaning [normal] every week.
4. Perform the service cleaning when leaving the printer for long time (2 weeks or more at power off state.)
5. Perform the head wash and the ink charge before printing when leaving the printer for long time.

For various periodic inspection and maintenance, refer to **[Section 4 Maintenance and Adjustment / Replacement]**.

Consumables

1. SIIT highly recommends you to use only SIIT standard or recommended consumables such as media, ink, and cleaning liquid for the printer.
   Generic consumables have the potential to cause damage to the printer, leading to interference in normal operation, and SIIT reserves the right to void the warranty if any issue is deemed by SIIT to be caused in part by the use of non-SIIT-standard or non-SIIT-recommended consumables.
2. Do not use ink past the date of expiration as this may cause a breakdown.
3. Put a used ink cartridge into a plastic bag and dispose of it as hazardous waste. Observe local regulations for disposal of Waste ink bottles.
4. The level in the Waste ink bottle must be periodically checked by visual inspection to prevent overflow.
5. Check Waste ink bottle regularly for leaks.
6. When the Waste ink bottle is installed or removed, place a sheet below so as not to stain the floor with spilled ink.
7. Store ink in a dark and cool place.
   NEVER store ink in a high temperature or direct sunlight.
   Ink change characteristic if exposed to direct sunlight.
8. SIIT highly recommends you to use SIIT-specified media only for the printer. The other media have the potential to cause damage to the printer, and SIIT reserves the right to void the warranty if any issue is deemed by SIIT to be caused in part by the use of non-SIIT-specified media.

Printer warranty

1. To understand the performances and functions of this printer, and use it safely, read this guide.
2. The use of consumables, accessories, and options other than the products specified by Seiko I Infotech Inc. have the potential to cause damage to the printer, and SIIT reserves the right to void the warranty if any issue is deemed by SIIT to be caused in part by the use of non-SIIT-specified or non-SIIT- recommended consumables, accessories, and options. SIIT highly recommends you to use SIIT-standard or -recommended ones only for the printer.
3. To ensure quality, the expiration date is on the ink, storage liquid, cap cleaning liquid and wiper cleaning liquid.
   Expiration date of use: Do not use after expiration.

Manual legend (Notational rules)

The following notations used for text and keys / LCD in this guide are as follows.

Notations

WARNING

- **Boxes marked with a "WARNING" describe points of caution for avoiding serious personal injury.**

CAUTION

- **Boxes marked with a "CAUTION" describe points of caution for avoiding injury to yourself or damage to the printer.**

Note

- **They explain the important items and cautions that should be kept when operated.**
  To avoid troubles of the printer or prevent damages or wrong operation, ensure to read.

HINT : Hint mark

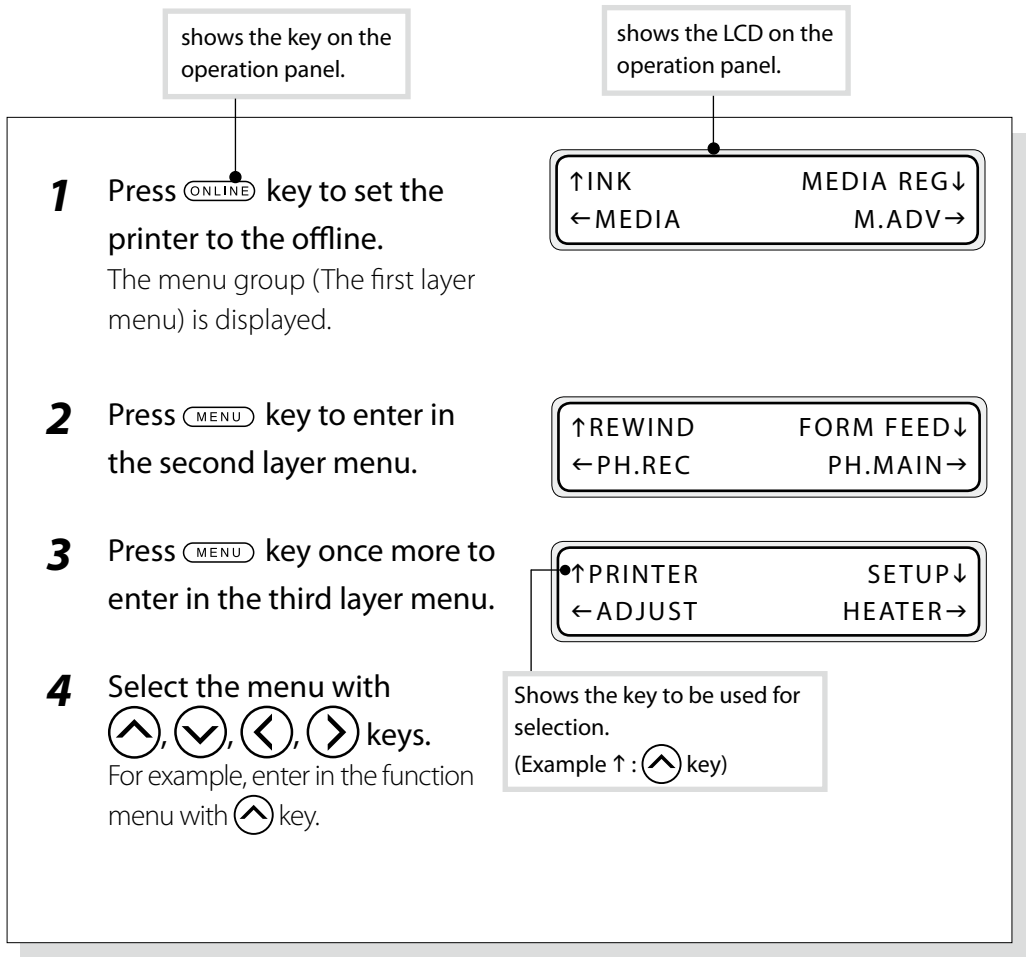
The hint symbol describes operations that make using or handling the printer easier.

Reference mark

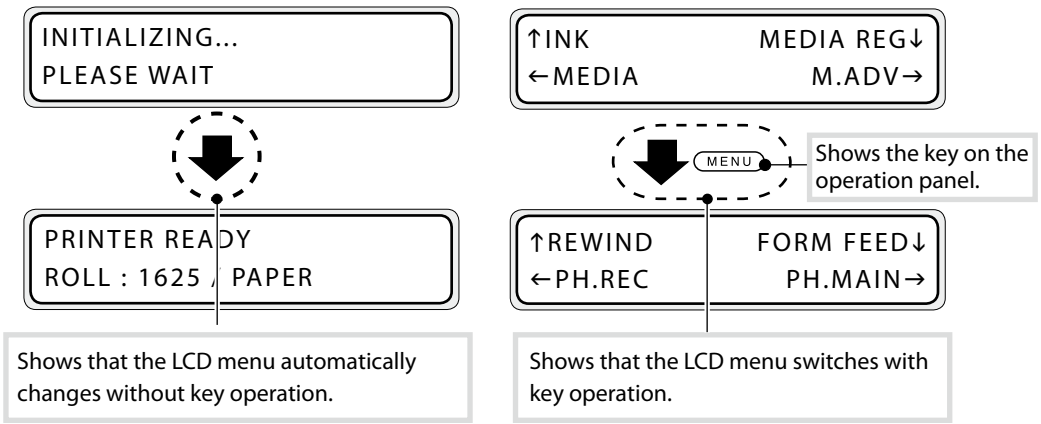
This mark is followed by a reference section or page number.

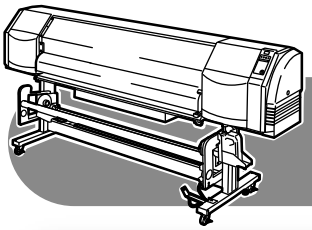
Key / LCD notations

(Example 1) Keys and LCDnotations in a sentence


shows the key on the operation panel.
shows the LCD on the operation panel.
1 Press ONLINE key to set the printer to the offline.
The menu group (The first layer menu) is displayed.
↑INK MEDIA REG↓
←MEDIA M.ADV→
2 Press MENU key to enter in the second layer menu.
↑REWIND FORM FEED↓
←PH.REC PH.MAIN→
3 Press MENU key once more to enter in the third layer menu.
↑PRINTER SETUP↓
←ADJUST HEATER→
4 Select the menu with ^, v, <, > keys.
For example, enter in the function menu with ^ key.
Shows the key to be used for selection.
(Example ↑ : ^ key)

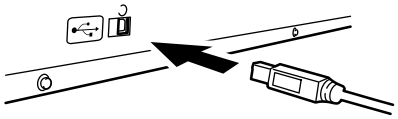
(Example 2) Transition of LCD state and the key operation in a sentence





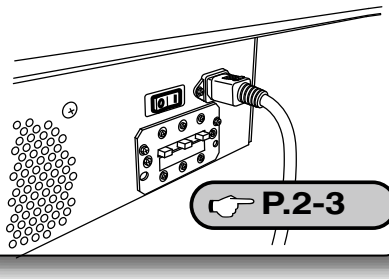
Starting out...

Connect to a computer.



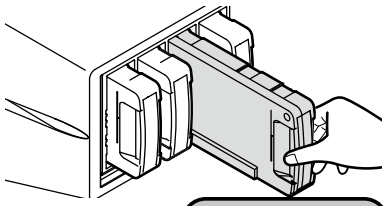
P.2-2

Turn on the power.



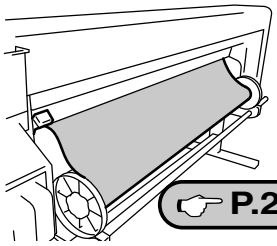
P.2-3

Replace the ink cartridge.



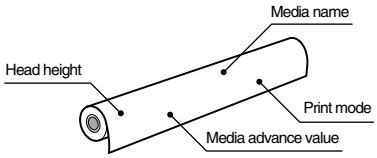
P.2-46

Load the roll media.



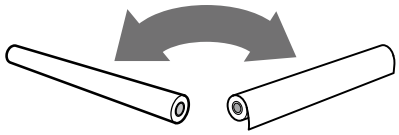
P.2-7

Register the media.



P.2-12

Replace the media.



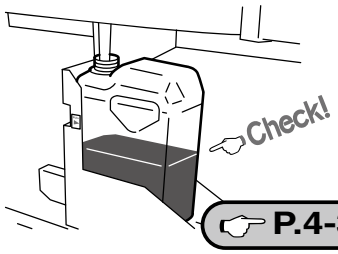
P.2-14

Turn off the power.

P.2-3

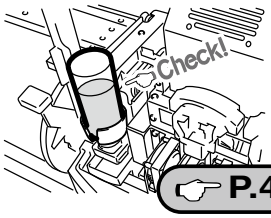
Regular Inspection (Maintenance)

1 **Check the Waste ink bottle.**



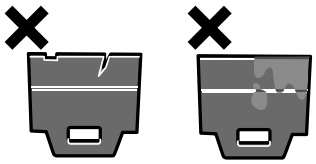
P.4-3

2 **Check the wiper cleaning liquid.**



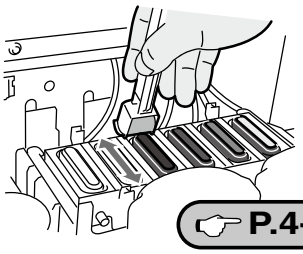
P.4-3

3 **Check stains on the Wiper Blade.**



P.4-4

4 **Clean the Capping unit.**



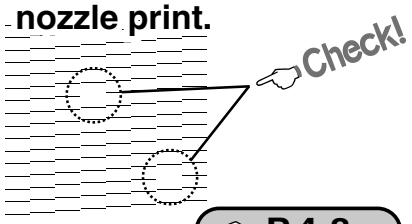
P.4-6

5 **Implementation of Print head cleaning [NORMAL ALL].**

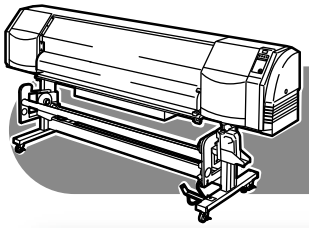
```
#PH RECOVERY
>NORMAL ALL
```

P.4-19

6 **Implementation of nozzle print.**

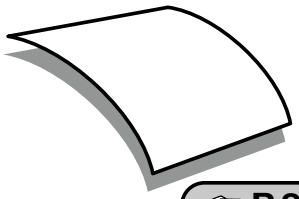


P.4-8



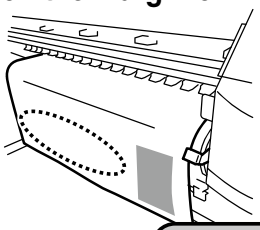
When you want to . . .

Print on the cut media (sheet).



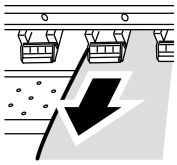
☞ P.2-15

Print on the margin of media.



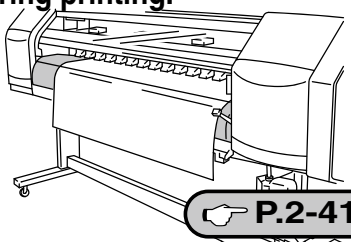
☞ P.2-39

Change the media advance value during printing.



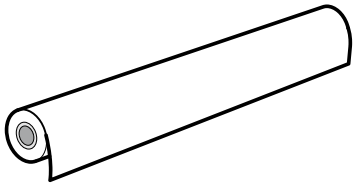
☞ P.4-32

Change the heater temperature during printing.



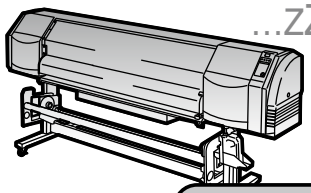
☞ P.2-41

Print on the thick media.



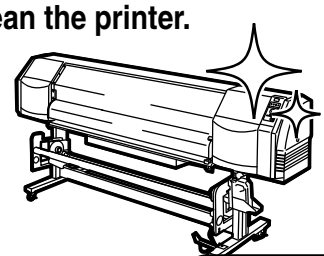
☞ P.2-44

Switch off the printer for a long period of time.



☞ P.4-10

Clean the printer.



☞ P.4-14

With new media, the printer needs to be adjusted.

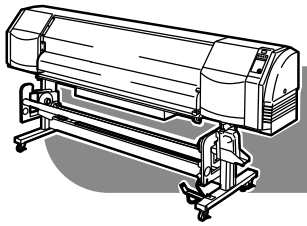
When replacing with new media

Media advance value setting ☞ P.4-28

Adjust the advance amount of the media.

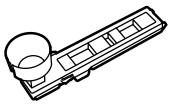
Adjustment of the Print head bi-direction position ☞ P.4-34

Adjust the ink target position in the bi-directional print.



Replacement/Trouble

Replace consumable.

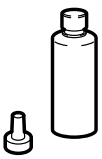


Wiper sponge

P.4-25

Media cutter blade

P.4-27



Wiper cleaning liquid

P.4-23

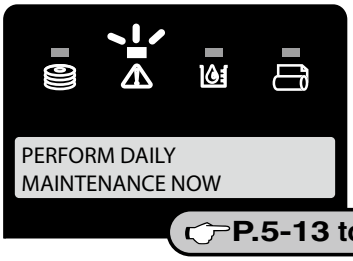
Wiper blade

P.4-21

Waste ink bottle

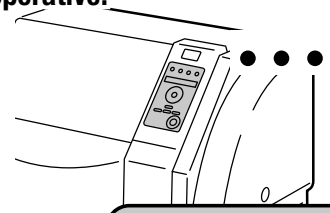
P.2-48

The warning message is displayed.



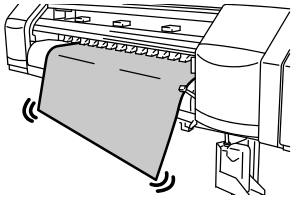
P.5-13 to

The panel operation becomes inoperative.



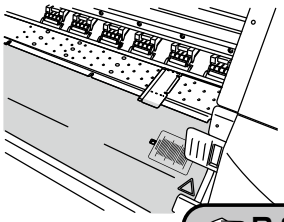
P.5-6, P.5-13

The media is slantingly advanced.



P.2-7, P.2-33, P.2-34

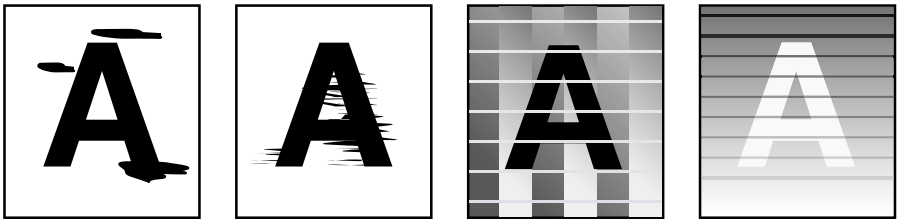
The heater does not warm up.



P.2-41

Smears or stripes appear on the print.

P.5-15 to



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Options A-3
Consumables A-3

1 Overview

This section describes the information needed before using the printer (basic knowledge). After reading this section, proceed to section 2.

(Content in this section)

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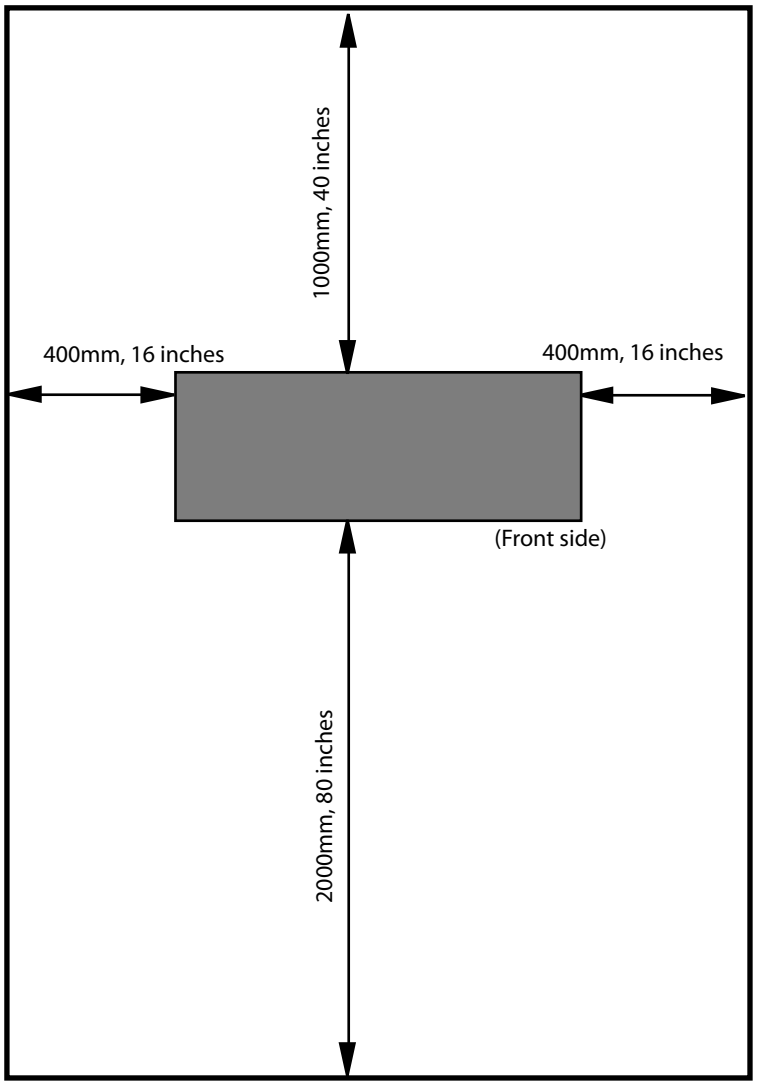
Operating conditions

This section describes the operating conditions required for the printer.

Installation space

The adequate space is required around the printer for normal operations, including supplies replacement, print processing, blower unit shifting and ventilation, as well as parts replacement for repairing.

■ Installation and maintenance space



Height direction : 1750
(Unit : mm)

Environmental conditions

■ Operating temperature and humidity levels

The printer should be used within the temperature and humidity levels shown below.

Temperature : 15 °C to 30 °C (60 °F to 86 °F)
Humidity : 30% to 70%

◇ To obtain better print quality, use the printer within temperatures of 20 to 25 °C (68 °F to 77 °F.)
◇ To keep a stable and good print quality, the printer slows down the print speed when the operating temperatures exceeds 40 °C (104°F).

Note

- **When the printer is used out of range of the operating temperature and humidity, the print quality may be degraded and/or print may be stopped.**
- **It takes time for the printer to reach the operating environment temperature and humidity. To get good printed image quality, it is recommended to keep the room temperature 20 to 25°C , 68 to 77°F and use the printer after 1 hour.**

■ Places where the printer must not be installed

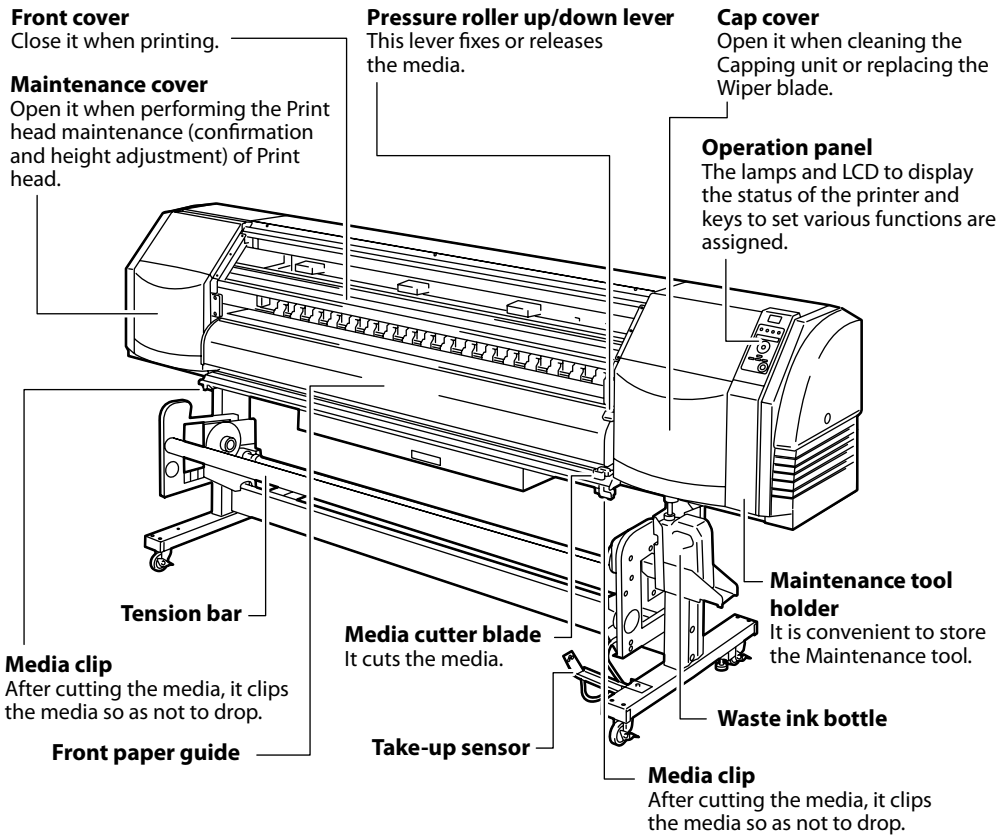
Do not install the printer in the following places:

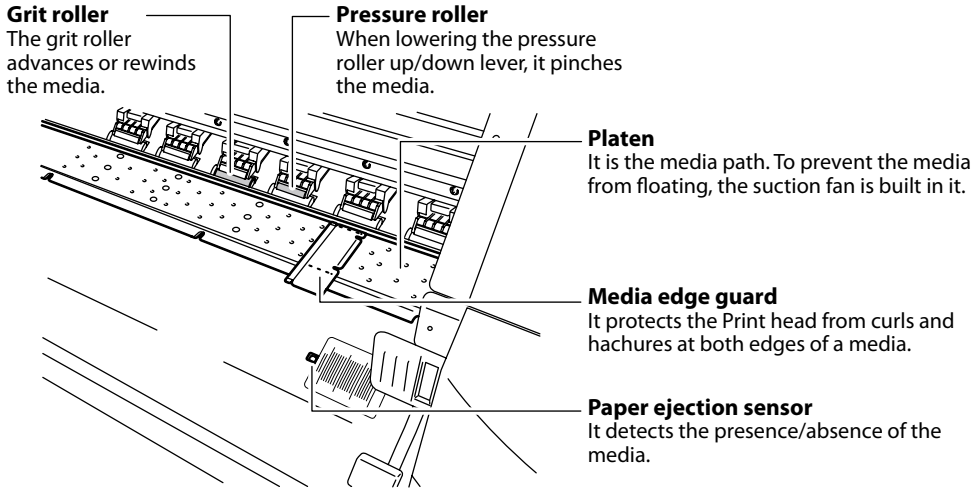
◇ Places exposed to direct sunlight
◇ Places subject to vibration
◇ Places with excessive dust
◇ Places subject to extreme changes in temperature or humidity
◇ Places near an air conditioner or a heater
◇ Places where the printer may get wet
◇ Places subject to direct air circulation from vents
◇ Places near a diazo copier that may generate ammonia gas
◇ Places with poor ventilation
◇ Unstable places

Appearance / Name and function of each part

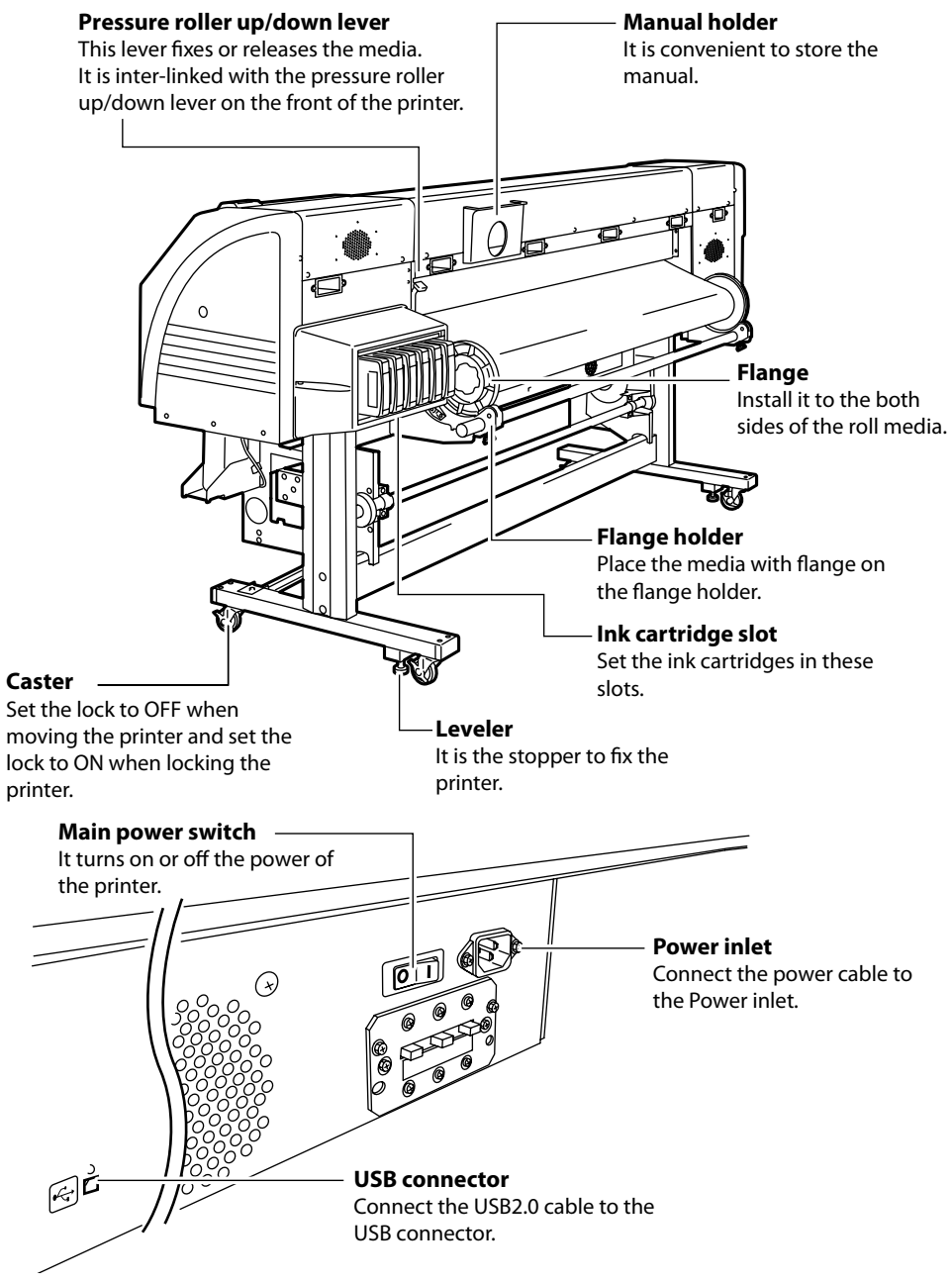
The printer is shown with the name and function of each component.

Printer front (Paper exit side)


Front cover
Close it when printing.
Maintenance cover
Open it when performing the Print head maintenance (confirmation and height adjustment) of Print head.
Pressure roller up/down lever
This lever fixes or releases the media.
Cap cover
Open it when cleaning the Capping unit or replacing the Wiper blade.
Operation panel
The lamps and LCD to display the status of the printer and keys to set various functions are assigned.
Tension bar
Media clip
After cutting the media, it clips the media so as not to drop.
Front paper guide
Media cutter blade
It cuts the media.
Take-up sensor
Maintenance tool holder
It is convenient to store the Maintenance tool.
Waste ink bottle
Media clip
After cutting the media, it clips the media so as not to drop.


Grit roller
The grit roller advances or rewinds the media.
Pressure roller
When lowering the pressure roller up/down lever, it pinches the media.
Platen
It is the media path. To prevent the media from floating, the suction fan is built in it.
Media edge guard
It protects the Print head from curls and hachures at both edges of a media.
Paper ejection sensor
It detects the presence/absence of the media.

Printer rear (Paper feed side)

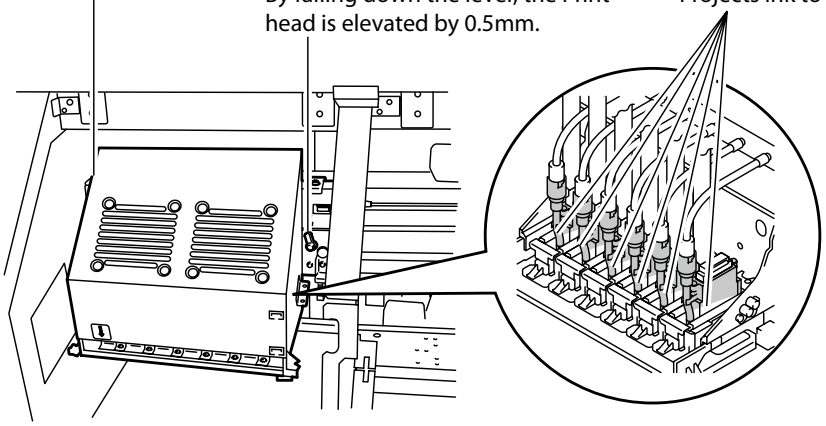

Pressure roller up/down lever
This lever fixes or releases the media.
It is inter-linked with the pressure roller up/down lever on the front of the printer.
Manual holder
It is convenient to store the manual.
Flange
Install it to the both sides of the roll media.
Flange holder
Place the media with flange on the flange holder.
Ink cartridge slot
Set the ink cartridges in these slots.
Caster
Set the lock to OFF when moving the printer and set the lock to ON when locking the printer.
Leveler
It is the stopper to fix the printer.
Main power switch
It turns on or off the power of the printer.
Power inlet
Connect the power cable to the Power inlet.
USB connector
Connect the USB2.0 cable to the USB connector.

Print head

Carriage

Head up down mechanism
By falling down the lever, the Print head is elevated by 0.5mm.

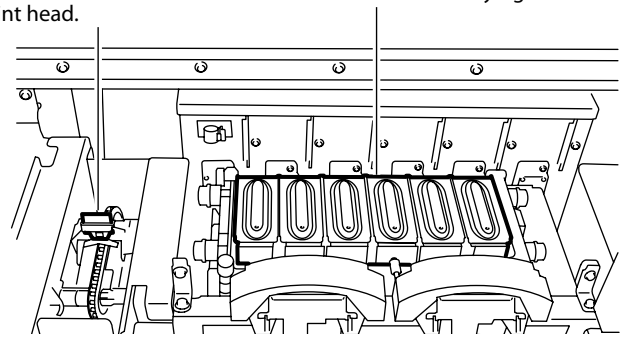
Print heads
Projects ink to the media



Capping unit

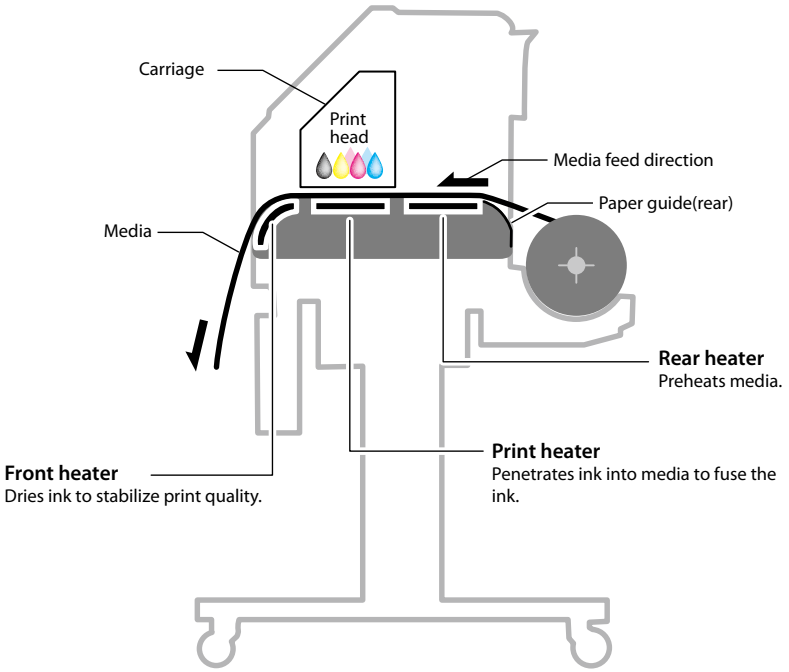
Wiper blade
It removes foreign matters on the surface of nozzle of the Print head.

Capping unit
It prevents the nozzle of the Print head from drying.



Printer heater unit

This printer is equipped with three heaters for ink fusing and image quality stabilization.



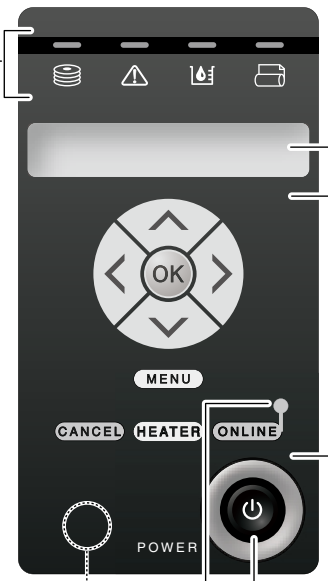
* These three heaters are controlled independently.
(☞ P.2-41 [Changing temperature using the heater control menu])

WARNING

- **Do not touch these heaters to avoid burn as they become hot.**

Operation Panel

The keys, LEDs and LCD are laid on the operation panel of the printer as shown below. The buzzer is to notify the operator when an error occurs or an invalid key is pressed.



LED
ON, Blink and OFF indicate the status of the printer.

Data LED (Green)
It indicates the data reception state
- Blink: The printer is receiving the data from a computer.
- OFF: No data reception from a computer

Error LED (Orange)
It indicates the presence/absence of error.
- ON: An error exists.
- Blink: Warning present (☞P.5-13)
- OFF: Normal (No error)

Ink LED (Green)
It indicates the presence/absence of ink.
- ON: All of inks are present.
- Blink: Remaining ink is less. Near expiration date of ink in use
- OFF: No ink

Media LED (Green)
It indicates the presence/absence of media.
- ON: Media presence (Either roll media or cut media is loaded.)
- Blink: Take-up time out
- OFF: No media (Neither roll media nor cut media)

ONLINE LED
It indicates the online/offline state of the printer.
- ON: Online
- Blink: Print pause mode
- OFF: Offline

LCD
It shows the status of the printer and displays the menu window. It displays various message and status in alpha-numeral, KANA and mark notation (2 rows, 20 characters). The menu adopts the layer structure. Each menu can be accessed with the ▲▼◀▶ keys or menu key.

Key
Use the keys for menu operation of the printer.

ONLINE
Used for switching the online/offline of the printer.

MENU
Used as the input auxiliary (switches the layer display of the menu) key of the parameter.

CANCEL
Used to cancel the parameter entered.

OK
Used to fix the menu and parameters.

HEATER
Used to enter heater control menu.

▲▼◀▶
Use for selecting the menu group and switching the menu (selection, increment/decrement of numeral value).

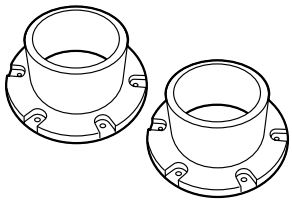
Power switch
Use as the power switch to turn on or off the power of the printer.

Buzzer
Sounds at the error occurrence, warning the invalid key entry, daily maintenance and warning the uncapped Print head.

Options

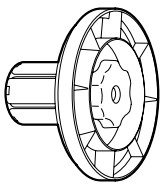
Exhaust attachment

An optional unit to attach an exhaust duct to the printer.



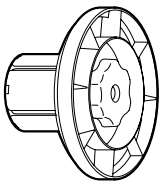
2 inch flange

This flange is used to load the roll media of 2 inch core.

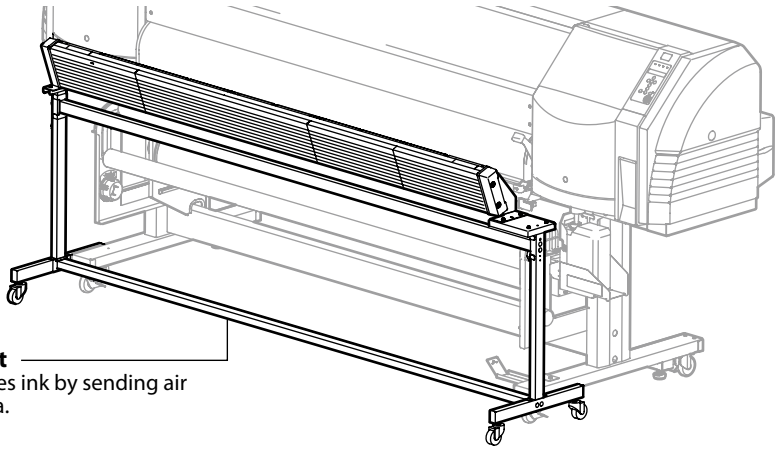


3 inch flange

This flange is used to load the roll media of 3 inch core.



Blower unit



Blower unit
This unit dries ink by sending air to the media.

Consumables

Media

■ Type of media

The media specified by our company is provided.
For more details, contact your dealer or Seiko I Infotech sales.
- Glossy Vinyl chloride
- Matte Vinyl chloride
- Tarpaulin

■ Precautions for storing media

◇ Avoid direct sunlight and water regardless of before and after opening the package. Put media in plastic to prevent dust and store media in a dry, cool and dark place.
◇ Avoid rapid change of temperature and humidity and store media with no condensation.
◇ Do not store media in standing on end to prevent unraveling of media and damage of roll edge.
◇ Do not pile up media.

■ Precautions for disposing of media

◇ Dispose of media in a manner consistent with local regulations.

■ Precautions for preparing media

◇ Avoid a change of temperature and humidity after opening package. Load media after leaving media in the operation environment for 3 hours or more. Be cautious changing humidity by turning air conditioners ON or OFF.
◇ Curl of paper in low humidity and wrinkle of media in high humidity may occur easily. Use paper in normal temperature and humidity environment (around 23 °C, 73 °F and 50%RH).
◇ Do not damage media. The roll edge (both edges of roll) affects media feeding.
Also, do not drop or wet the media. Doing so may cause print quality problems or damage to the printer.
◇ Hold edges of the media so as not to touch the print surface. Contamination from hands may cause poor print quality.
◇ Fix unraveling of the roll media before loading.

■ Precautions for handling prints.

◇ Do not touch the print surface before the ink dries. Handle by the edges of the media.
◇ Rubbing print surface causes color fading or color transfer. To prevent color transfer, do not stack prints.
◇ Do not stack printed media on print from copier or laser printer. Also, do not place the printed media directly on the wax-coated floor. This may damage the prints.
◇ Do not rub, scratch, or fold the printed surface of media. Color may be lost or the surface (coated layer of the media) may come off.
◇ Do not leave the paper in wet environment.

■ Other Precautions of media

◇ Media causes color fading and a change in quality in getting old.
◇ Dust and debris produced when cutting the media may cause the lost color.
◇ When the thin media is used, the platen may be stained by the ink permeating he back of the media. In this case, wipe the ink off the platen, referring to [Section 4 Maintenance and Adjustment / Replacement]. Otherwise, the ink may cause media jams.

Ink

■ Ink types

Use only the recommended ink cartridges listed below.
EG-OUTDOOR LX and EG-OUTDOOR EX cannot be applied concurrently.

EG-OUTDOOR EX

Type	Content	Quantity
IP5-201	Y (Yellow)	500 ml
IP5-202	M (Magenta)	500 ml
IP5-203	C (Cyan)	500 ml
IP5-204	K (Black)	500 ml
IP5-205	Lc (Light cyan)	500 ml
IP5-206	Lm (Light magenta)	500 ml

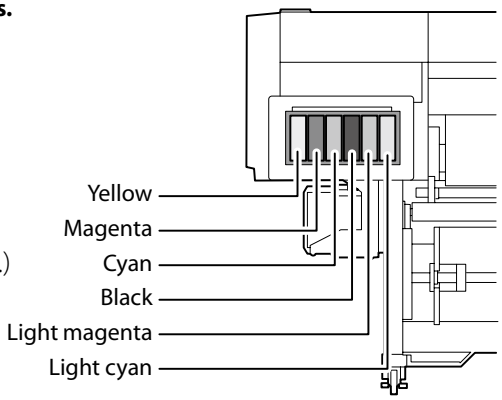
EG-OUTDOOR LX

Type	Content	Quantity
IP5-701	Y (Yellow)	500 ml
IP5-702	M (Magenta)	500 ml
IP5-703	C (Cyan)	500 ml
IP5-704	K (Black)	500 ml
IP5-705	Lc (Light cyan)	500 ml
IP5-706	Lm (Light magenta)	500 ml

Note

- **Failure to use the recommended ink cartridge may lead to a deterioration of the print quality or a printer malfunction. This may invalidate your warranty.**
- **The EG-Outdoor EX ink expiration date is 12 months from the date of production.**
- **The EG-Outdoor LX ink expiration date is 14 months from the date of production.**
- **Install all of 6 color cartridges. If you remove any of the cartridges, install a new one.**

Ink cartridges must be installed in all six slots. The positions of ink cartridges are specified by color. (See the figure at the right hand side.)



Note

- **Do not attempt to forcibly insert an ink cartridge in the slot of a different color.**

WARNING

- **Never place the ink close to open flames. Doing so will create a fire hazard.**
- **Ink has an expiration date. When it expires, the printed image quality may deteriorate or the printer may malfunction.**
- **Store ink cartridges in a dry, cool and dark place.**
- **Always use the specified ink. Failure to follow this instruction may cause poor print quality or a breakdown.**

WARNING

- **Do not swallow ink and avoid contact with eyes. It will cause respiratory distress and can harm the eyes. If it gets into the eyes, rinse with clean water and consult a doctor immediately. If it is swallowed, do not try to induce vomiting. Seek medical attention immediately.**

CAUTION

- **Do not attempt to disassemble ink cartridges.**

■ Precautions for ink storage and processing

CAUTION

- **Securely put a used ink cartridge into a plastic bag and dispose of it as a hazardous waste. Observe any local regulations for disposal of ink cartridges.**

Waste ink bottle

Use the recommended Waste ink bottle listed below.
Consumables applied to EG-OUTDOOR LX and EG-OUTDOOR EX are different.

EG-OUTDOOR EX

Type	Content	Quantity
IP5-139	Waste ink bottle	1 piece

EG-OUTDOOR LX

Type	Content	Quantity
IP5-109	Waste ink bottle	1 piece

WARNING

- **Never put the Waste ink bottle near open flames. Doing so may cause a fire hazard.**
- **Do not swallow ink and avoid contact with eyes. It will cause respiratory distress and can harm the eyes. If it gets into the eyes, rinse with clean water and consult a doctor immediately. If it is swallowed, do not try to induce vomiting. Seek medical attention immediately.**

CAUTION

- **Install the Waste ink bottle securely.**
- **A Waste ink bottle must always be installed. If it is removed for replacement, a new one must be installed.**

■ Precautions for handling the Waste ink bottle

CAUTION

- **After use, securely fasten the attached cap and dispose of this product as hazardous waste.**
  If you have any questions, please contact your dealer or nearest sales office.

Daily maintenance kit

Use the recommended cleaning liquid listed below for cap and wiper cleaning.
Consumables applied to EG-OUTDOOR LX and EG-OUTDOOR EX are different.

EG-OUTDOOR EX

Type	Content	Quantity
IP5-230	Cap cleaning liquid (300 ml)	1 piece
	Wiper cleaning liquid (200 ml)	1 piece
	Cleaning swab	10 pieces
	Cleaning stick	1 piece
	Cleaning roller	30 pieces
	Wiper blade	1 piece
	Tweezers	1 piece

EG-OUTDOOR LX

Type	Content	Quantity
IP5-710	Cap cleaning liquid (300 ml)	1 piece
	Wiper cleaning liquid (200 ml)	1 piece
	Cleaning swab	10 pieces
	Cleaning stick	1 piece
	Cleaning roller	30 pieces
	Wiper blade	1 piece
	Tweezers	1 piece

WARNING

- **Do not swallow cleaning liquid or avoid its splashes on the eye to prevent breathing trouble or visual impairment. If cleaning liquid gets into the eye, wash it off with clean running water and consult a doctor. If it is swallowed, do not try to vomit it forcefully, but consult a doctor.**
- **Do not keep the cap cleaning liquid and the wiper cleaning liquid in a high temperature place or in direct sunshine.**
  Never place the cap cleaning liquid close to open flames. Doing so will create a fire hazard.

Cap cleaning liquid

Use the following Cap cleaning liquid specified by Seiko I Infotech.
Common consumables are applied to EG-OUTDOOR LX and EG-OUTDOOR EX.

Type	Content	Quantity
IP5-136	Cap cleaning liquid (300 ml)	1 piece

WARNING

- **Do not swallow cap cleaning liquid and avoid contact with eyes. It will cause respiratory distress and can harm the eyes. If it gets into the eyes, rinse with clean water and consult a doctor immediately. If it is swallowed, do not try to induce vomiting. Seek medical attention immediately.**
- **Do not keep the cap cleaning liquid bottle in a high temperature place or in direct sunshine.**
  Never place the cap cleaning liquid close to open flames. Doing so will create a fire hazard.

Wiper cleaning liquid set

Use the following Wiper cleaning liquid specified by Seiko I Infotech.
Consumables applied to EG-OUTDOOR LX and EG-OUTDOOR EX are different.

EG-OUTDOOR EX

Type	Content	Quantity
IP5-231	Wiper cleaning liquid (200 ml)	3 bottles

EG-OUTDOOR LX

Type	Content	Quantity
IP5-712	Wiper cleaning liquid (200 ml)	3 bottles

WARNING

- **Do not swallow Wiper cleaning liquid and avoid contact with eyes. It will cause respiratory distress and can harm the eyes. If it gets into the eyes, rinse with clean water and consult a doctor immediately. If it is swallowed, do not try to induce vomiting. Seek medical attention immediately.**
- **Do not keep the Wiper cleaning liquid bottle in a high temperature place or in direct sunshine.**
  Never place the wiper cleaning liquid close to open flames. Doing so will create a fire hazard.

Cap cleaning stick

Use the following Cap cleaning stick specified by Seiko I Infotech.
Common consumables are applied to EG-OUTDOOR LX and EG-OUTDOOR EX.

Type	Content	Quantity
IP5-120	Cap cleaning stick	1 piece
	Cap cleaning roller	1 piece

Cap cleaning roller set

Use the following Cap cleaning roller specified by Seiko I Infotech.
Common consumables are applied to EG-OUTDOOR LX and EG-OUTDOOR EX.

Type	Content	Quantity
IP5-147	Cap cleaning roller	30 pieces

Cleaning swab

Use the Cleaning swab specified by Seiko I Infotech.
Common consumables are applied to EG-OUTDOOR LX and EG-OUTDOOR EX.

Type	Content	Quantity
IP6-147	Cleaning swab	300 pieces

Wiper blade

Use the following Wiper blade specified by Seiko I Infotech.
Common consumables are applied to EG-OUTDOOR LX and EG-OUTDOOR EX.

Type	Content	Quantity
IP5-122	Wiper blade	2 pieces

Media cutter blade

Use the following Media cutter blade specified by Seiko I Infotech.
Common consumables are applied to EG-OUTDOOR LX and EG-OUTDOOR EX.

Type	Content	Quantity
IP5-124	Media cutter blade	1 piece

Wiper sponge

Use the following Wiper sponge specified by Seiko I Infotech.
Common consumables are applied to EG-OUTDOOR LX and EG-OUTDOOR EX.

Type	Content	Quantity
IP5-123	Wiper sponge	1 piece

Storage liquid cartridge set

Use the following Storage liquid cartridge specified by Seiko I Infotech.
Consumables applied to EG-OUTDOOR LX and EG-OUTDOOR EX are different.

EG-OUTDOOR EX

Type	Content	Quantity
IP5-107	Storage liquid cartridge	6 pieces

EG-OUTDOOR LX

Type	Content	Quantity
IP5-713	Storage liquid cartridge	6 pieces

Cleaning liquid cartridge set

Use the following Cleaning liquid cartridge specified by Seiko I Infotech.
Consumables applied to EG-OUTDOOR LX and EG-OUTDOOR EX are different.

EG-OUTDOOR EX

Type	Content	Quantity
IP5-138	Cleaning liquid cartridge	6 pieces

EG-OUTDOOR LX

Type	Content	Quantity
IP5-714	Cleaning liquid cartridge	6 pieces

LCD display and state of printer

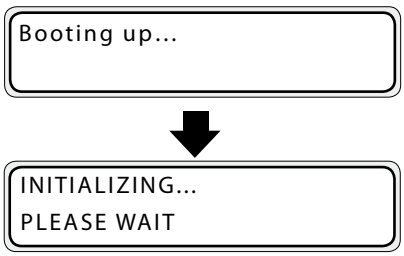
This section illustrates how to read the LCD display and the state of printer.

How to read LCD

(1) Initialization display

Shows the initialization of the printer at the start-up is being processed.

- When the printer starts up normally, it automatically enters the idle online mode.

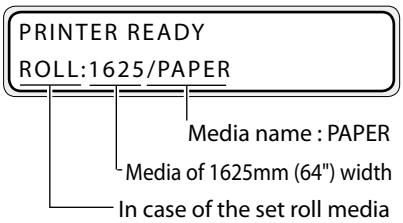


(2) Online state (idle mode) display

Shows the printer is ready to receive data from the computer (The online LED is on.)

- When pressing INPUT key in the idle mode, the menu can move to (OK).

- Select the meter unit system or the inch unit system for the display of media width in [LENGTH UNITS] of the system menu (P.3-55). In this manual, the meter unit system will be used.



(3) Online state (print mode) display

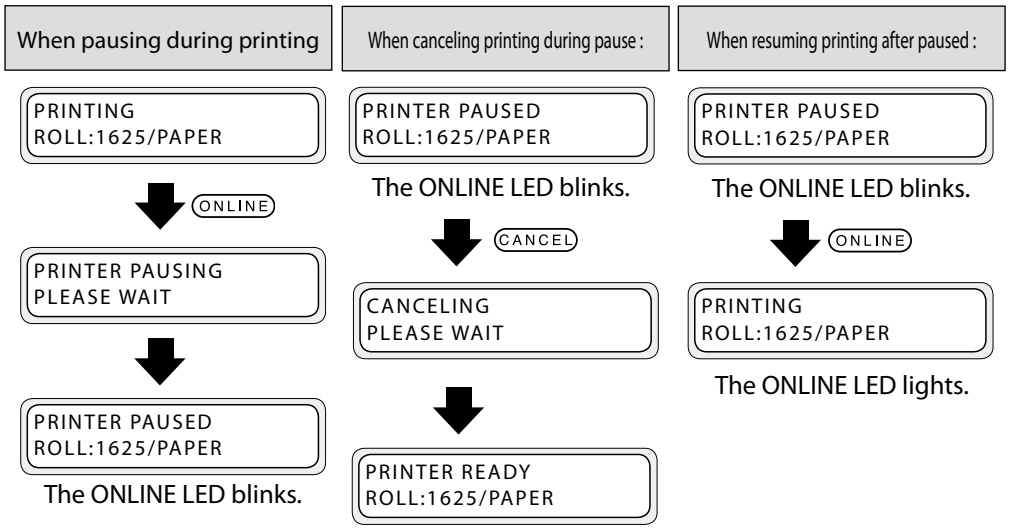
Shows that the data is being received and printing.

(4) Online state (waiting for print) display

Shows that the Carriage is waiting Reasons for this include data printing, warm-up or waiting for data transfer.

(5) ONLINE state (print pause mode) display

The section illustrates the interrupted state during printing.



HINT

- By pressing the (OK) key during pause (In the state of ONLINE LED blinking), cleaning the Print head can be executed.

(6) ONLINE state (preheating)

This message indicates that the heater is in heating process to reach the preset temperature.

```
PREHEATING
ROLL:1625/PAPER
```

(7) ONLINE state (During head warming-up)

This message indicates that the heads are warming up.

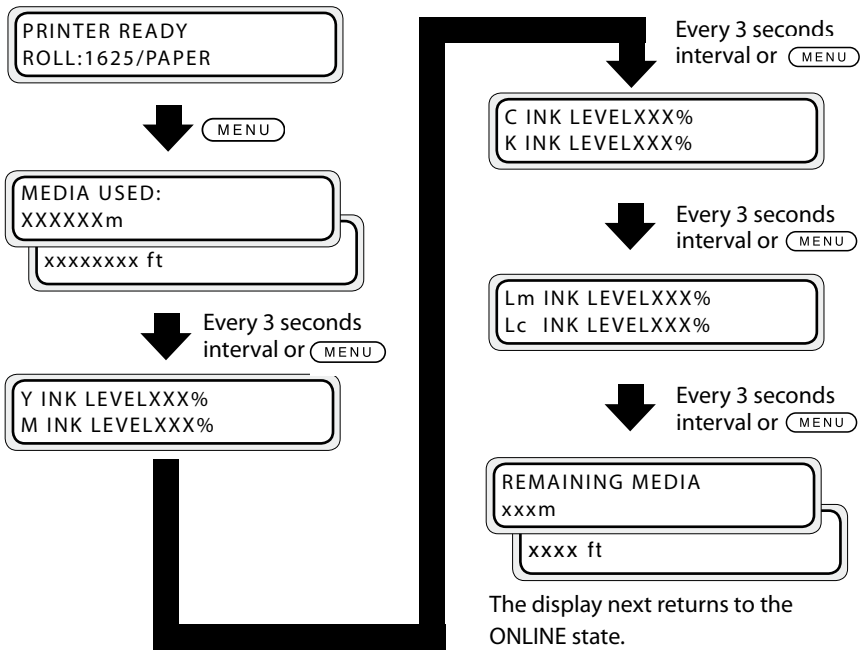
```
PH WARMING UP
ROLL:1625/PAPER    XXm
```

HINT

- Head warming-up is conducted when the room temperature (temperature inside the printer) is low. Recommended room temperature is 20 to 25°C.
- Head warming-up is a function for stable printing. Do not cancel head warming-up as much as possible.
- When head warming-up is canceled, the carriage stops at the certain number of scan. (If the number other than 0 is preset as PH REST PERIOD in MEDIA REG MENU, the value preset in PH REST PERIOD and PH REST TIME is used.)

(8) ONLINE state (print information mode) display

Shows the media used, remaining ink, and remaining media from online state.



When the daily maintenance is not performed or the life and replacement time of consumable parts approaches, the following messages appear.

When the daily maintenance is not implemented as usual

Every 3 seconds interval or MENU

YY : Ink color
When the ink nearly expired

Every 3 seconds interval or MENU

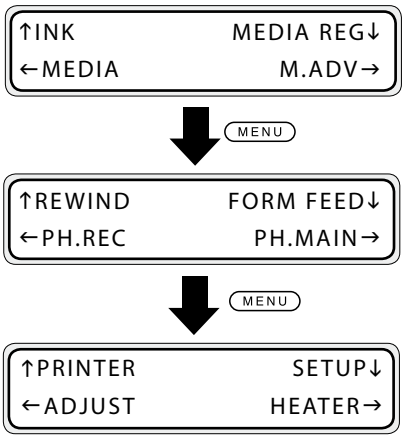
Life expiration parts (☞**P.5-13 [When the warning message is displayed]**)

The display next returns to the ONLINE state.

(9) OFFLINE state (menu mode) display

This illustrates that the menu operation available in the offline state.
(☞**P.3-2 [Basic menu operation in offline mode]**)

- ↑↓←→ denotes the access key to each menu.
- By pressing the (OK) key in the menu mode display, [Cleaning Menu] is activated.



(10) Shutdown state display

This message indicates that the shutdown process of printer is being executed.

2 Basic operation

This sections describes the basic operation of printer.

(Content of this section)

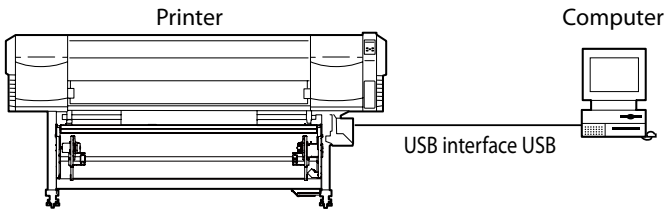
Connection to a computer 2-2
Power ON / OFF procedure..... 2-3
Media replacement 2-7
How to use the take-up reel unit.....2-16
How to use the blower unit (option).....2-31
How to use the media edge guards 2-33
How to switch the pressure.....2-34
How to use the lifter.....2-35
Cut the media.....2-36
Feeding the media [Feed] 2-37
Rewind the media [Back Feed].....2-38
How to use the origin setting function 2-39
Changing temperature using the heater control menu.....2-41
Change the Print head height 2-44
Ink cartridge replacement 2-46
Waste ink bottle replacement 2-48

Connection to a computer

This section describes the procedure to connect the printer to a computer.

System configuration (Connection example)

See below.



Connecting procedure

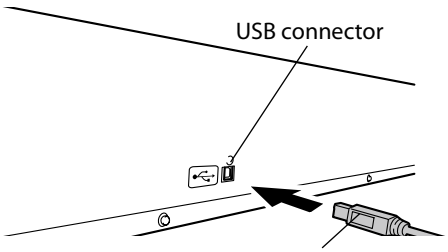
Connect the cable in the procedure below.

1 Turn off the power of the printer and computer to be connected.

Note

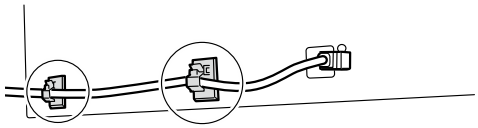
- **When the printer and a computer are connected, turn on the power of the printer first and turn off the power of printer last when powering them down.**

2 Connect the specific cable to the USB connector at the rear of printer.

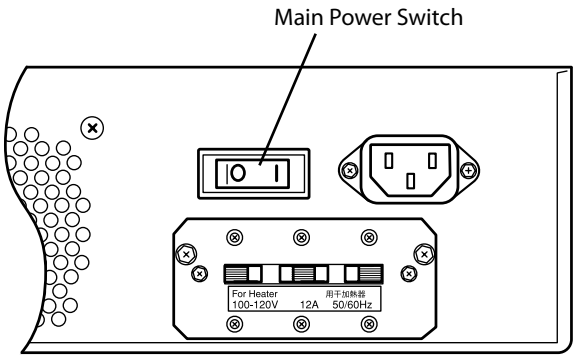


Note

- **Use a USB 2.0 cable.**
- **When using USB Hub, use a UBS2.0 supported product.**
- **For the cable and hub used for USB connection to the system, use the USB-IF approved products. When connecting the USB non-approved cable, hub and equipment, the printer may not function properly.**
- **The maximum length of one cable is 5 m. If you desire to extend longer than 5 m, use the hub. The maximum length configuration is 5 stages connection of hub. If the cable longer than 5 m only is used or the cables are merely connected, the printer may not function properly.**
- **To protect the USB connector, clamp the USB2.0 cable to the printer body.**



Power ON / OFF procedure



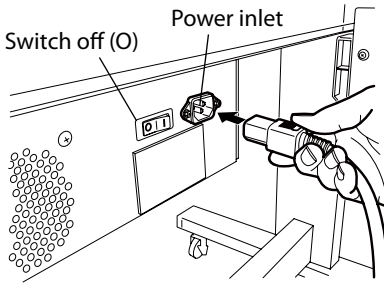
Turn on the main power switch. Use the power switch on the operation panel of printer whenever subsequently turning the power on or off.

Note

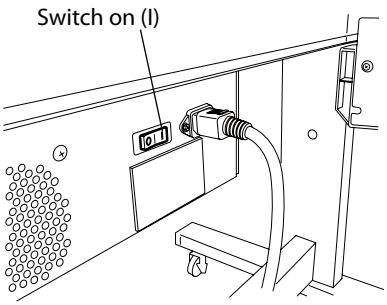
- **When the printer and a computer are connected, turn on the power of the printer first and turn off the power of printer last when powering them down.**

Power-on procedure

1 With the main power switch at the rear of printer turned off, connect the supplied power cable to the power socket of printer and AC power supply outlet.

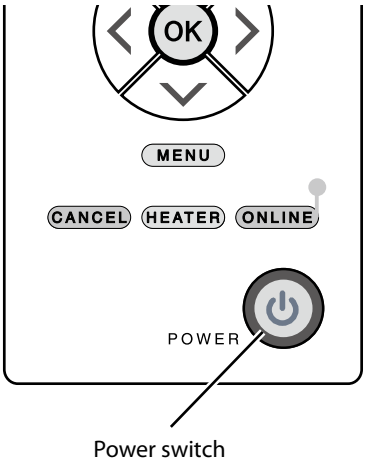


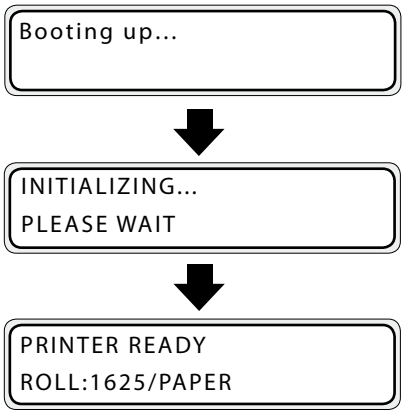
2 Turn on the main power switch on (I) at the rear of printer



3 Turn on the power switch on the operation panel.

When turning on the power, the printer performs the power-on self-diagnostic test and displays the following message on the operation panel.





Example of the set roll media of 1625 (mm)

Note

- **When the printer is performing "INITIALIZING..."or "CLEANING", if the power is removed unnecessarily, ink may drip or the Print head may be damaged.**

HINT

- If the LED on the operation panel does not light when the main power switch at the rear of printer and the power on / off switch on the operation panel are turn on, , the power supply is defective.
- When a problem is detected in the power-on self-diagnostic test, the error message is displayed on the LCD.
  Refer to [Section 5 Troubleshooting], for more information.

Note

- **Do not use the power cable other than the supplied power cable for the printer.**
- **Confirm that the supplied power cable meets the requirements of AC power in your local area.**
- **Please check that the AC source and voltage of the 100/200 V switch conform to the local specifications.**

Power-off procedure

1 To turn off the power of printer, keep pressing the power switch on the operation panel for 2 seconds.

The message shown above is displayed on the LCD to show that the shutdown process is being executed. The power is off after the shutdown is finished.

To keep the Print head in the good condition at shutdown, the fill cap operation (state that the cap is filled with ink) is performed.
When turning off the power for a short period of time, by pressing the power switch while pressing the CANCEL key, the fill cap operation is skipped and the power will be turned off.
However, executing the fill cap operation is normally recommended.

Note

- **When the printer power needs to be completely turned off for transportation, connection to a computer, replacement of internal parts, use the main power switch at the rear of printer.**
- **After turning the power off using the power switch in the rear of the printer, wait at least one minute before turning it back on.**
- **To keep he Print heads in the good condition, the printer automatically and periodically the fill cap operation while in standby mode.**
  It is recommended to keep both the main power switch of the printer and the power switch on the operation panel on at all times.

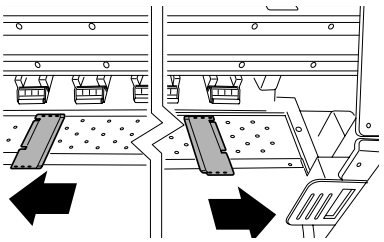
Media replacement

This section describes **[Roll media installation / removal procedure]**.
There two situations requiring roll media replacement:
- When the roll media is finished, the roll media is replaced.
- When the roll media is jammed, the roll media is replaced.

The roll media replacement procedure for each case is shown below.

Roll media installation procedure

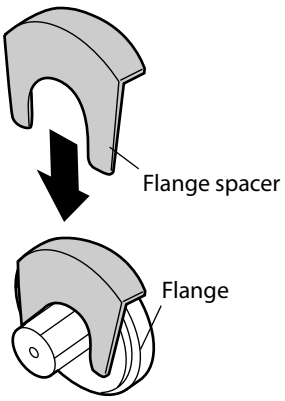
1 Open the Front cover and slide the media edge guards to each ends of the platen. Then, close the Front cover.



Note
- **Move the media edge guards to both ends so they cannot enter under the media.**
- **After completing the media replacement work, set the media guards. (☞P.2-33 [How to use the media edge guard])**

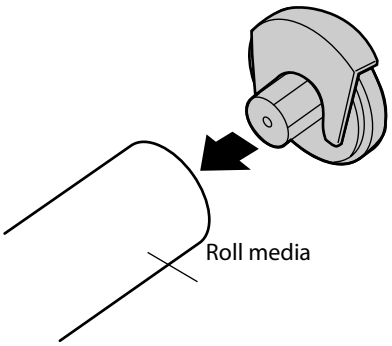
HINT - Shift the blower unit to prevent any interference with the operation.

2 Install the flange spacer to the flange at the right hand side.

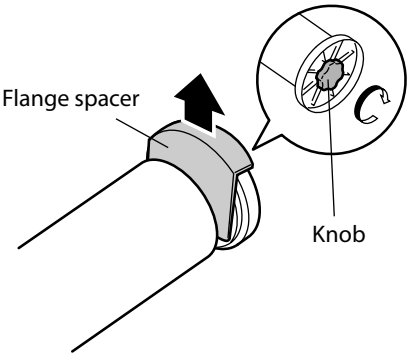


3 While holding the flange spacer in place, insert the flange in the media.
Push the flange in as far as it goes.

Note
- **When inserting the flange in the roll media, be careful not to cause the media to shift on the roll or damage the end surface of roll media.**



4 After securing the flange by turning the knob, pull out the flange spacer.

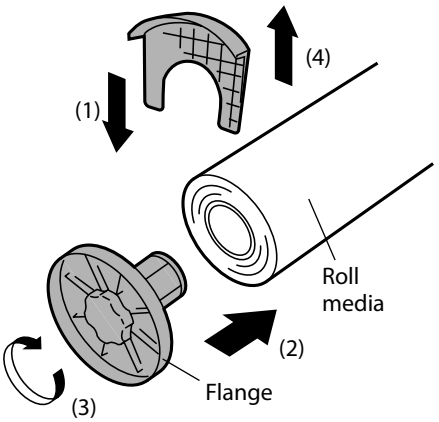


Note

- **Tighten the knob of flange firmly. If the flange is loosened, the media may not be fed straight.**
- **During printing, the knob of flange may loosen. Re-tighten the knob at an appropriate time (every ten meters of printing or before printing a long print**

5 Install the flange at the left hand side of the roll media.

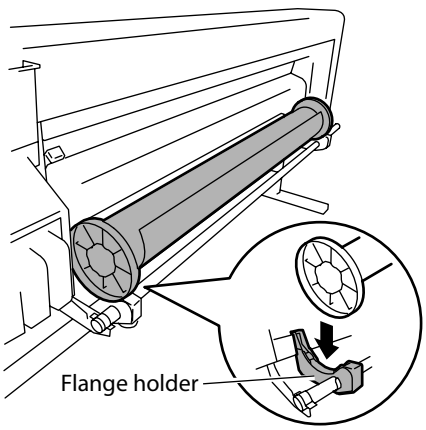
(1) Install the flange spacer to the flange.
(2) Insert the flange in the roll media.
(3) Push the flange as far as it goes and fix the flange by turning the knob.
(4) Pull out the flange spacer.



Note

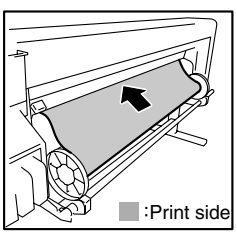
- **When the end of the media is glued to the core, the glue may stick to the paper guide and platen. If this happens, remove the glue and clean the platen.**

6 Place right and left flanges on the roll so they set on the flange holders.

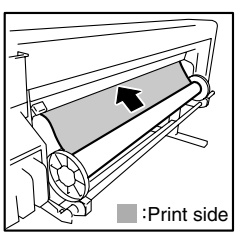


HINT In the direction of media setting

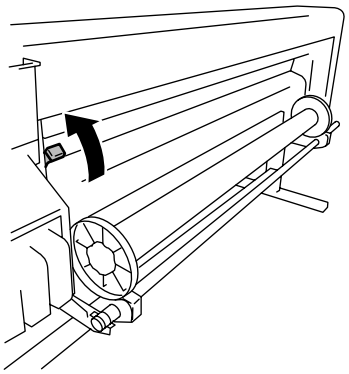
<In case of the roll media with print side top exiting>



<In case of the roll media with print side bottom exit->



7 Raise the pressure roller up / down lever.



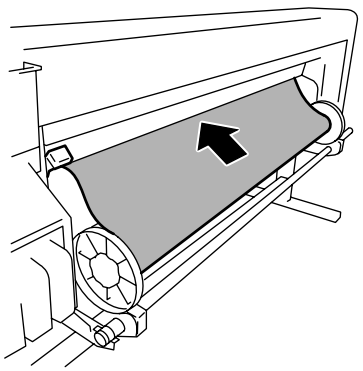
Note

- **There are three selectable positions (up, middle and down) on the pressure roller up / down lever.**
- **To raise the (release) the pressure roller here, raise the pressure roller up / down lever to the top position. (☞P.2-34 ([How to switch the pressure])**

8 Feed the media between the pressure roller and grit roller and advance the media until the leading edge of media comes out of the Front cover.

Advance the media until the leading edge of media comes out at a distance of 200 mm

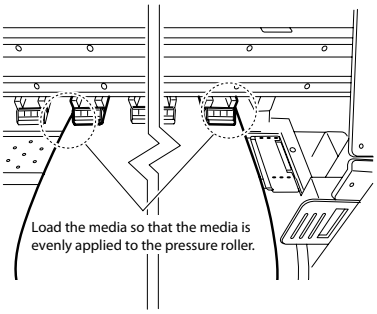
When the leading edge of media comes out of the Front cover, a confirmation beep sounds.



Note

- **Depending on the environment, it may be hard to advance the media due to it sticking to the paper guide. In this case, advance the media while raising the media from the paper guide by holding both edges of media by hand.**
- **If the leading edge of media is curled up or curled down, the media may be caught in the printer and may not be set. If the media is curled too much, do not use it.**
- **Be careful that the leading edge of media does not to touch the Front cover. If the roll media has a rolling tendency, stretch the media to eliminate the rolling before loading.**
- **Ensure that the media edge guard does not enter under the media.**

9 Slide the flange holder so that the pressure of pressure roller is equal at edges of the media.

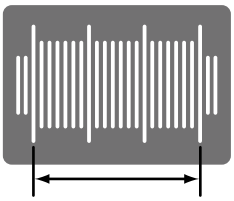


Note

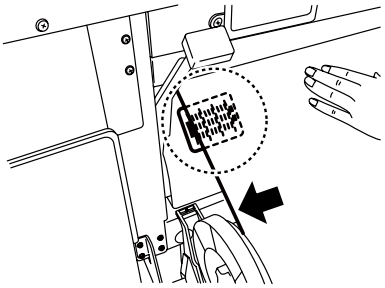
- **When wrinkles occur on the media, pull the lifter to release the pressure roller. (☞P.2-35[How to use the lifter])**

HINT

- Noting the relationship between the label scale (general rule line) and the media width will be easier when adjusting the position while loading the media next time.



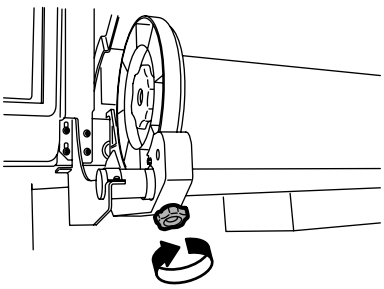
Set so that the end surface of media comes within this range.



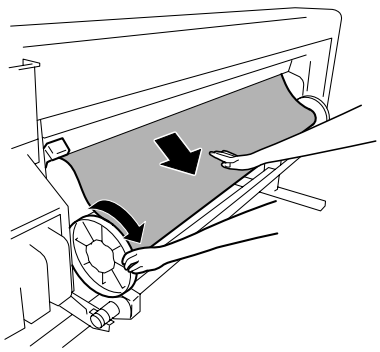
Note

- **If you shift the media only, skewing will occur. So adjust the load position by moving the media and flange holder together.**

10 Secure the position of flange holders by tightening the screw of flange holder at the left hand side.



11 Hold the center of media by hand and turn back the flange to eliminate the slack.

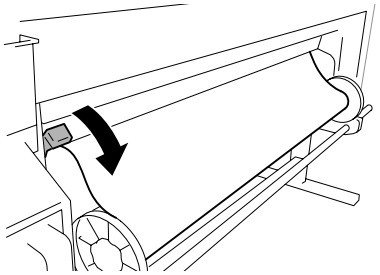


Note

- **Do not forcibly align the edge surface of media to the general rule line. Set the media straight against the roll.**

12 Lower the pressure roller up / down lever.

After this, follow the instructions on LCD screen.



Note

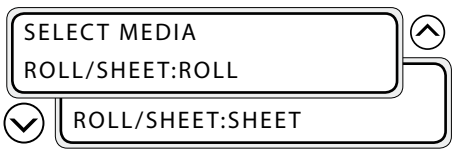
- **To lower (press) the pressure roller, lower the pressure roller up / down lever to the lowest position. (☞P.2-34 ([How to switch the pressure])**

13 Open the Front cover and align the media edge guards over the both ends of media. Then, close the Front cover.

Ensure that the media edge guards do not fall under the media and that thick media does not bind.

After visually confirming that the media edge guards are properly set, press the (OK) key.

14 Select either the roll media or the cut media (sheet)



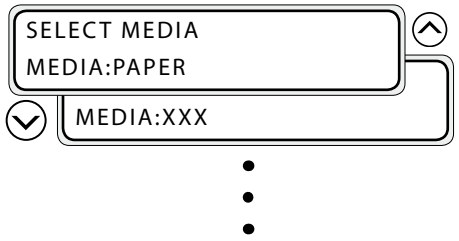
Either [roll] or [sheet] can be selected with (^) key or (v) key.

Here, select [roll] and press the (OK) key.

(To return to the media selection, press the (CANCEL) key.)

15 Select the type of media.

Select the type of media registered with the ^ and v keys and press the OK key. (☞**P.3-20 [MEDIA REG MENU]**)



HINT To register a new media

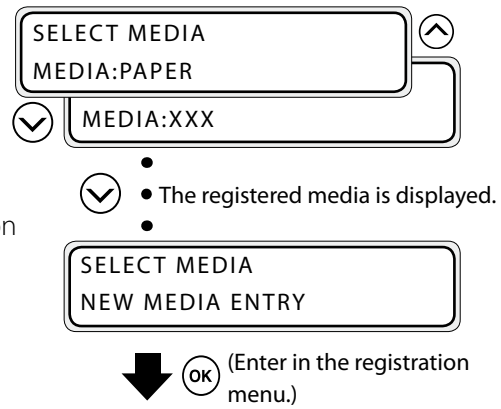
[NEW MEDIA ENTRY] is displayed at the end of the registered media.

Press the OK key to enter [MEDIA REG MENU].

The media registration procedure is the same as the registration from the registration menu. (☞**P.3-20 [MEDIA REG MENU]**)

Press "<" key to return from the media registration menu to the media type selection menu.

To return to the value before input, press the CANCEL key.

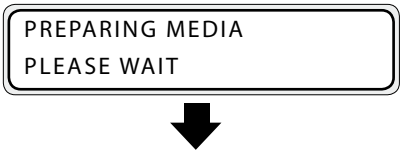


16 Enter the remaining length of media.

Enter the remaining length of roll media loaded to the printer.

(☞**P.3-18 [MEDIA MENU]**)

17 The media set operation automatically starts.



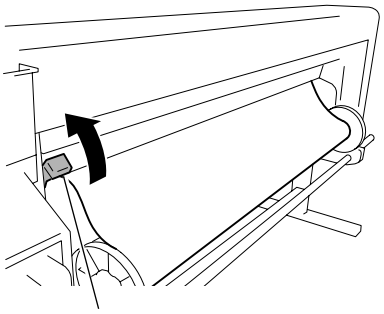
- When finished, the printer returns to the state of online state or offline state, if no error occurs.
- If an error occurs, the error message is displayed.
  Go back to step ***1*** and start with the beginning again.

Note

- **After installing the media, beware that the media does not enter in the gap of Media cutter blade or is not pinched by the media clip. Also ensure the media on the platen has no curl or wrinkles.**

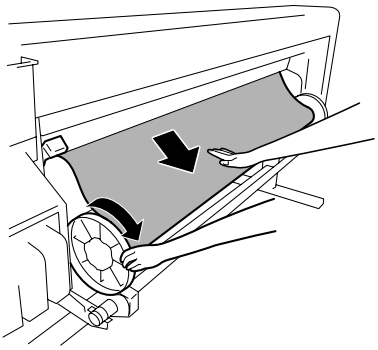
Roll media removal procedure

1 Raise the pressure roller up / down lever.

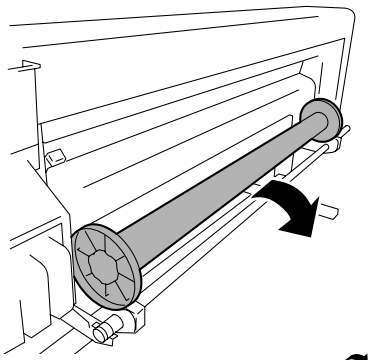


Pressure roller up / down lever

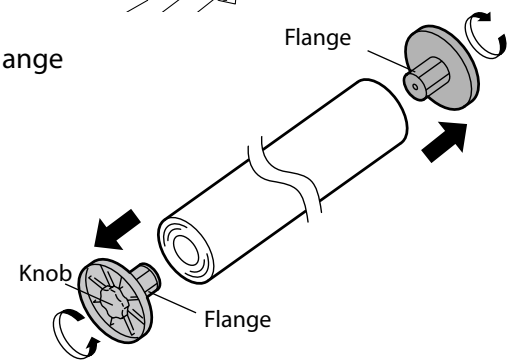
2 Rewind the flange to roll back the media.



3 Unload the roll media from the flange holder.



4 Loosen the knob and remove the flange from the media.



When the roll media exhausts and the roll media is replaced

When the printer runs out of media, the printer automatically detects the end and displays a message. Depending on the media's finishing, (media glued to core) the printer may not automatically detect. If printing is continued, the printer may be stained or damaged. Visually check the remainder of media.

1 The message appears on the LCD screen.

2 After this, according to [Media installation / removal procedure], replace the media.

When replacing the roll media due to jamming

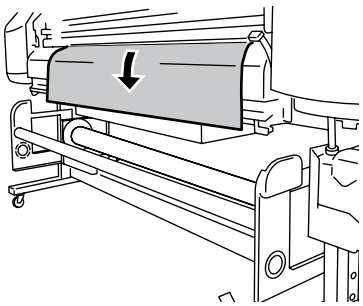
Refer to **[Section 5 Troubleshooting (How to clear media jams)].**

Cut media installation procedure

1 Open the Front cover and slide the media edge guards to both ends of platen. Then, close the Front cover.

2 Raise the pressure roller up / down lever.

3 Advance the media until the leading edge of media comes out of the Front cover.



4 Move the media so that both ends of media are evenly applied to the pressure roller.

5 Lower the pressure roller up / down lever.
Follow the instructions on the LCD screen.

Note

- **Select [SHEET] for [SELECT MEDIA].**
- **When selecting [SHEET], the remaining media cannot be entered.**

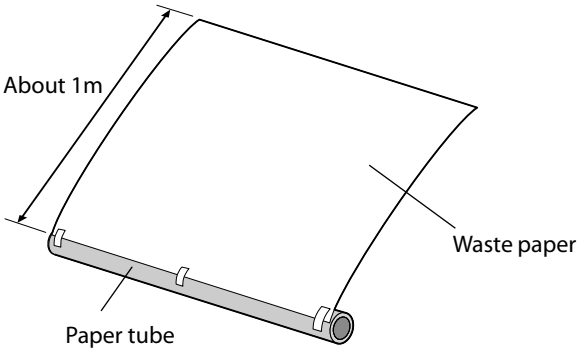
Cut media removal procedure

1 Raise the pressure roller up / down lever and remove the media.

How to use the take-up reel unit

Install the media on the take-up reel unit

1 Prepare the paper tube and waste paper (about 1 m) of which width is identical to that of media to be used. And paste the waste to the paper tube.



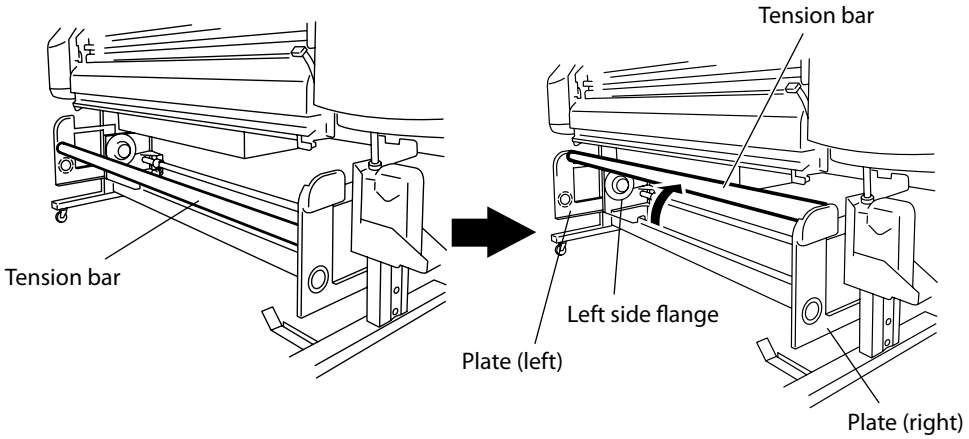
Note

- **If the media is not straight against the paper tube, it will cause skew.**
- **The width of paper tube for winding in the take-up reel unit should be the same as that of roll media for printing. If the wider one is used, take-up shift may occur.**

HINT

- Shift the blower unit to prevent any interference with the operation.

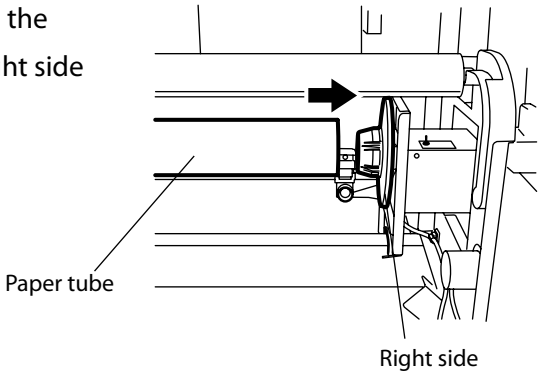
2 Move the Tension bar in the top position.



<Tension bar fixed position>

<Tension bar top position>

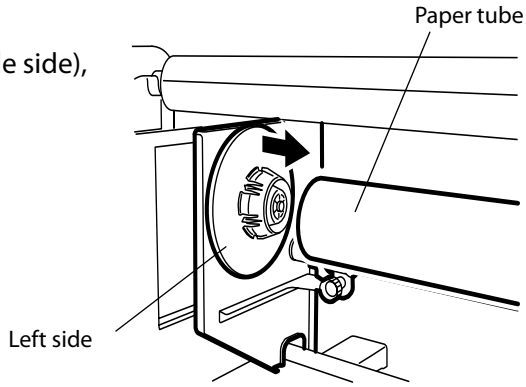
3 Insert the paper tube on which the waste paper is affixed in the right side flange (fixed side).



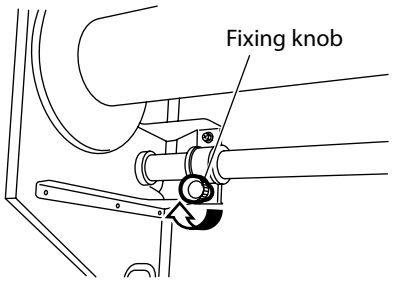
Note

- **It is not normally necessary to move the position of the right side flange, it is used as the fixed position. However, when aligning with the roller media installation position to the printer, adjust the position of right side flange.**

4 Sliding the left side flange (movable side), insert it in the paper tube.



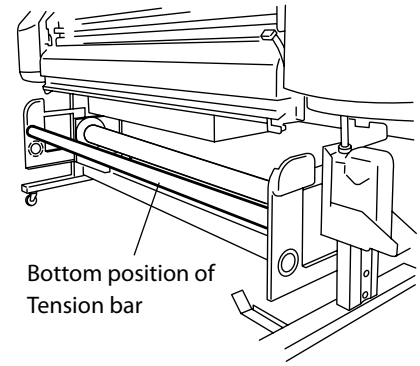
5 Tighten the knob at the left side firmly to secure the flange.



6 Return the Tension bar to the bottom position from the top position.

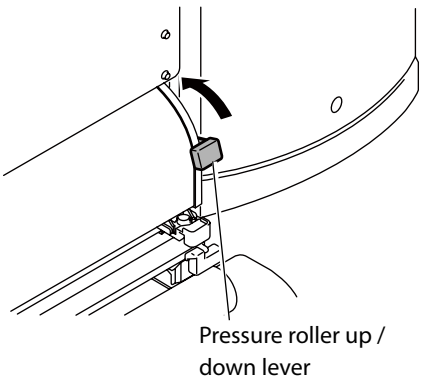
Note

- Whether using loose winding or tension winding modes, use the Tension bar in the bottom position during take-up operation.

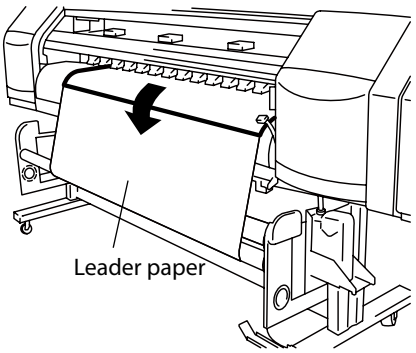


7 Raise the pressure roller up / down lever and install the roll media for printing to the printer.

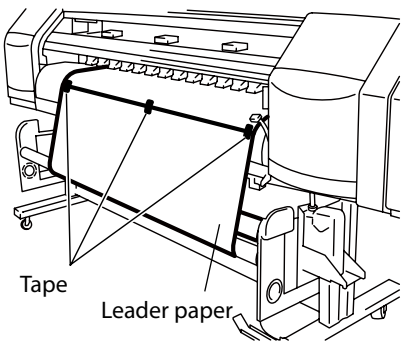
For media installation procedure, refer to ☞**P.2-7 [Media replacement]**.



8 By operating the feed menu on the operation panel, advance the media until it reaches the leader paper.

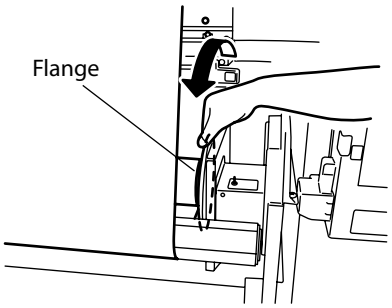


9 Joint the roll media and leader paper. Affix at three locations, right, left and center with adhesive tape.



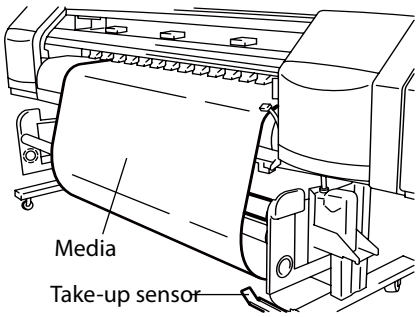
10 To eliminate the slack of leader paper (extra length), rotate the flange by hand to wind it.

<Incase of revolution>

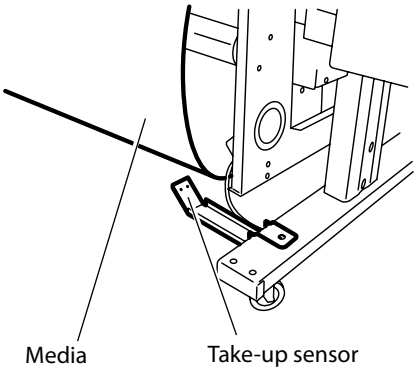


When used with print side in, rotate the flange in the reverse direction of arrow to eliminate the slack.

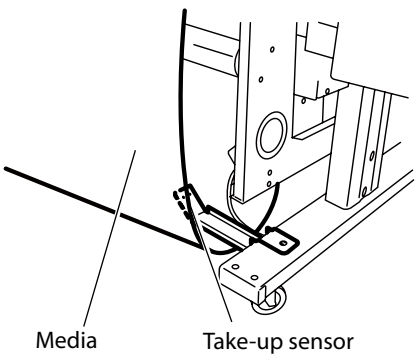
11 Ensure the media will travel between the media and the take-up sensor. If not, re-install the media.



○ The media locates over the take-up sensor.



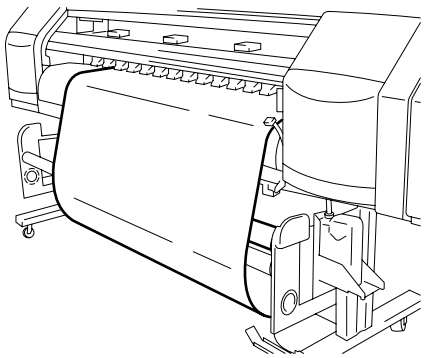
× The media penetrates under the take-up sensor.



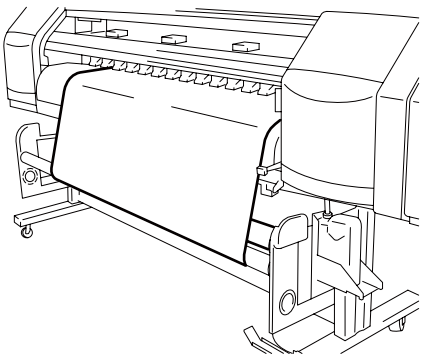
Tension take-up / Loose take-up setting

With the take-up, either tension or the loose configuration can be selected.
In normal use, the loose method is preferred.

※ Loose take-up configuration



※ Tension take-up configuration



■ Tension take-up configuration / Loose take-up configuration setting procedure

In [TUR MODE] of [MEDIA REG MENU], set the tension configuration.

<Operation panel LCD display>

1 Press (ONLINE) key to set the printer to the offline.

```
↑INK          MEDIA REG↓
←MEDIA          M.ADV→
```

2 Press (∨) key to enter in MEDIA REG MENU.

```
#SELECT MEDIA
>XX:YYYYYY
```

XX : Media number YYYYYY : Media name

3 With (∨), (∧) keys, select [# TUR MODE] and press (OK) key.

```
#TUR MODE
>XX:LOOSE          *
```

XX : Media number

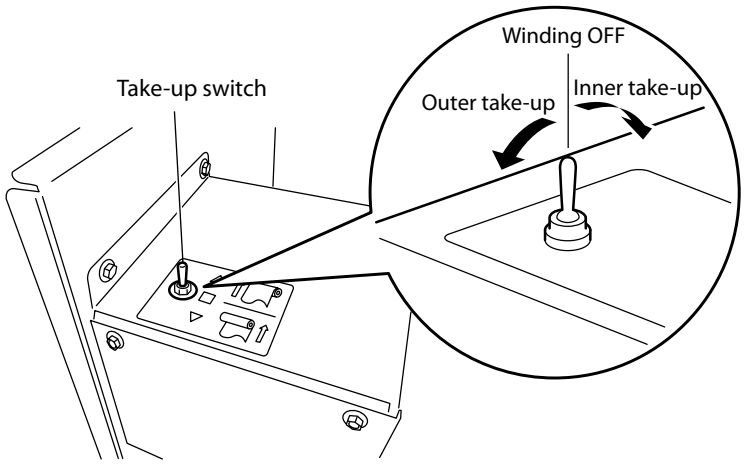
4 With (∨), (∧) keys, select [LOOSE] or [TENSION] and press (OK) key.

```
#TUR MODE
>XX:TENSION        *
```

XX : Media number

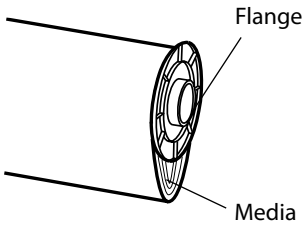
Take-up switch setting

For the take-up direction, the Outer take-up (print side out) or Inner take-up (print side out) can be selected.
When take-up is not used, set the take-up (winding) switch to [OFF].
Set the switch to the proper mode based of the figure below.



Note

- **When the take-up roll approaches the flange diameter, remove the take-up roll and replace it with a new core. If the roll exceeds the take-up flange diameter, take-up problems may occur.**



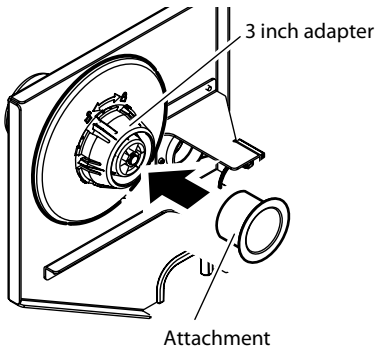
(When the take-up roll exceeds the flange diameter)

- **When not using the take-up, leading edge of media or the printed surface may touch the take-up sensor. This could affect the quality of the print.**
- **Handle the printed surface with care.**

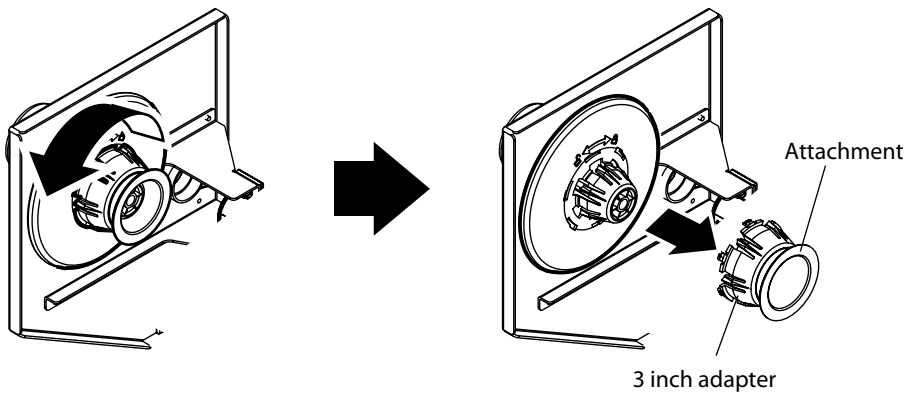
Using a 2 inch core

In this equipment, by removing the 3 inch adapter, the 2 inch paper tube can be used.
To remove the 3 inch adapter, the supplied attachment is needed. The removal procedure of 3 inch adapter is explained below.

1 Insert the attachment in the hole in the center of 3 inch adapter.



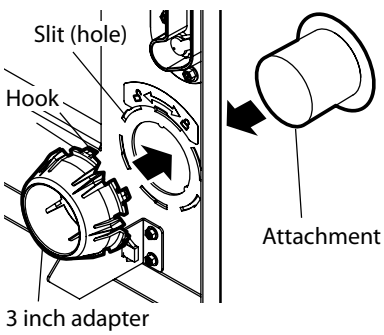
2 Turn counterclockwise (in the arrow direction) the 3 inch adapter and pull it out together with the attachment.



HINT

- Install the removed attachment into the left and right plates to keep them for later use. (See the figure at the right hand side.)
- Insert the 3 inch adapter in the slits (holes) of the left and right plates and turn clockwise (in the arrow direction).
- When installing the 3 inch adapter to the flange again, push the hook (projection) of 3 inch adapter in the slits (holes) of flange. Turn the adapter clockwise (in the arrow direction). The attachment is not necessary to install the 3 inch adapter, .

<In case of installing the plate (right)>



When the media cannot be winded in Loose take-up mode

This section describes the media setting to take up the media in the loose take-up configuration. Also, refer to ☞**P.2-7 [Media replacement]** and ☞**P.2-16 [How to use the take-up reel unit]**.

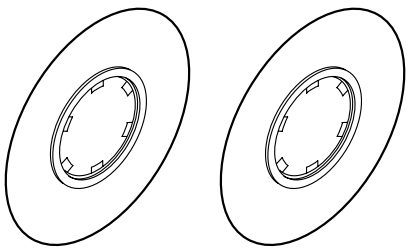
Note

- Loose take-up flanges are designed exclusively for the loose take-up. Do not use them for the tension take-up.

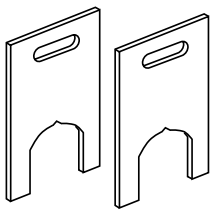
HINT

- Loose take-up flanges are necessary:
  When the media cannot be taken up fully by the loose take-up despite the media weighing below 24 kg.

In this section, the following parts are used. (The parts are included in the take-up reel unit parts package.)



Loose take-up flanges
<2 pieces>



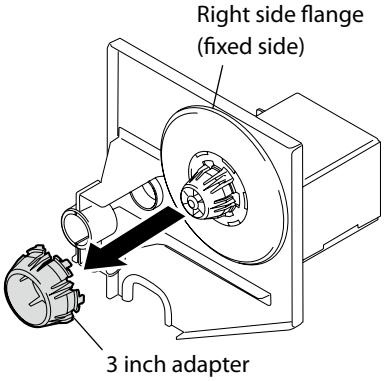
Paper tube spacers
<2 pieces>

Loose take-up flange installation procedure

In this section, the following procedure is for the right side (fixed side). Follow the same procedure to install the flanges to the left side (movable side) (symmetry).

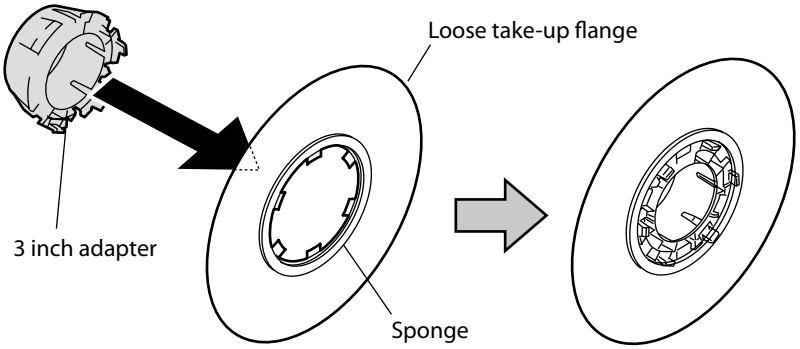
1 Remove the 3 inch adapter.

Use the supplied attachment to remove the adapter.

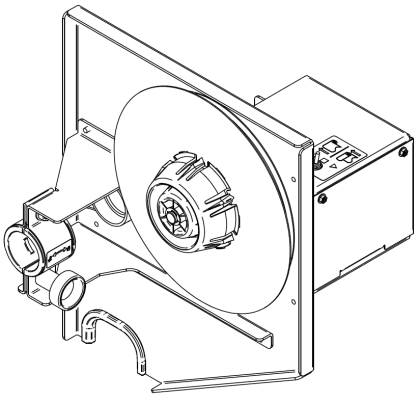


2 Install the 3 inch adapter to the loose take-up flange.

Install it to the surface where the sponge is not attached.



3 Install the 3 inch adapter with the loose take-up flange.



How to use the loose take-up flange

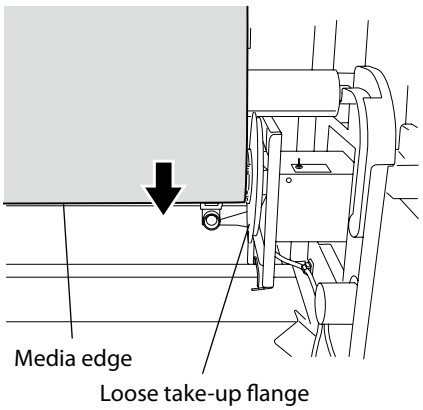
1 Adjust the position of the right side flange (take-up: fixed side)

Adjust the position of the flange holder (at the left of the paper feed side: movable side)

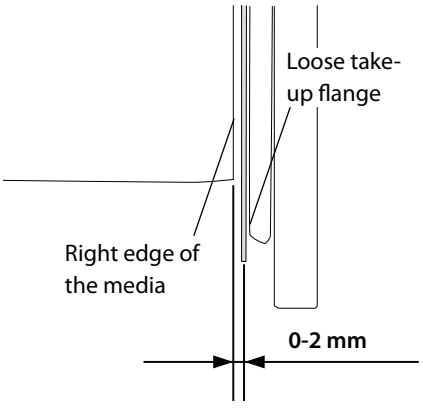
Note

- **The adjustment is required only at the initial operation of the loose take-up configuration.**
- **When the position of the flange holder (at the left of the paper feed side: fixed side) is changed, readjustment is necessary.**

(1) Take up the media edge and advance it to the flange position.



(2) Shift the fixed side unit so that the gap between the right edge of the media and the loose take-up flange falls within 0-2 mm.



(3) Tighten the knob at the right side (fixed side) firmly to secure the flange.

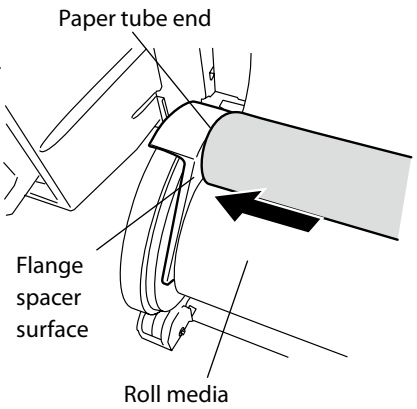
2 Check the length of the take-up paper tube.

Use the paper tube of which length is identical to the width of the media set on the printer, or shorter (by 9 mm at maximum.)

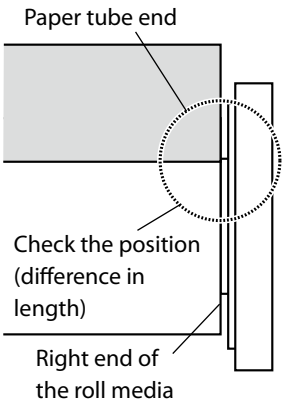
Note

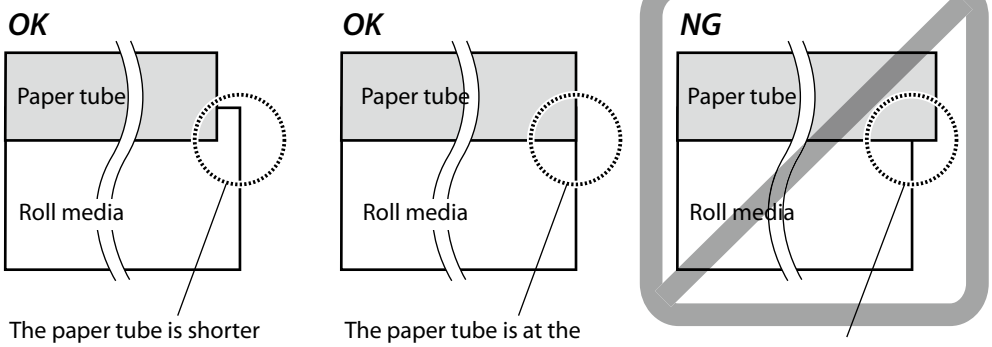
- Do not use the paper tube which is longer than the media width. The media cannot be taken up fully due to winding deviation.

(1) Set the flange spacer at the left side of the roll media set on the paper feed side. Press the paper tube end against the flange spacer surface.



(2) While maintaining the state described above, check the position (difference in length) of the right end of the roll media and the paper tube end.



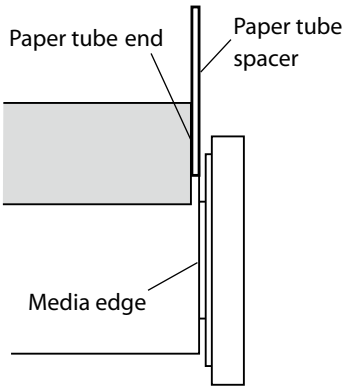


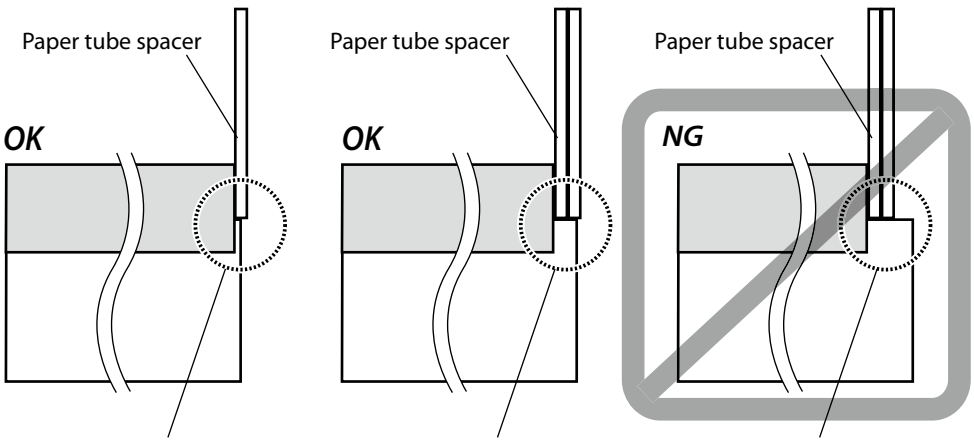
The paper tube is shorter than the roll media (by 9 mm at maximum).

The paper tube is at the same length as the roll media.

The paper tube is longer than the roll media.

(3) When the paper tube is shorter than the roll media, apply paper tube spacers and confirm that the difference in length is within 9mm. Install one or two paper tube spacers (4.5mm thickness for each). If the paper tube becomes longer than the roll media, it indicates that the difference in length is within 9 mm.





With a single paper tube spacer, its end exceeds the media end.
The difference is within 4.5 mm.

With two paper tube spacers, its end exceeds the media end.
The difference is within 9 mm.

With two paper tube spacers, its end does not exceed the media end.
The difference is 9 mm or more.

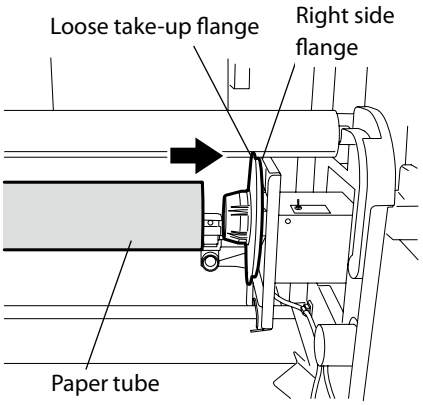
Note

- 2 paper spacers can be used at maximum. Do not use the paper tube which requires more than 2 paper tube spacers.

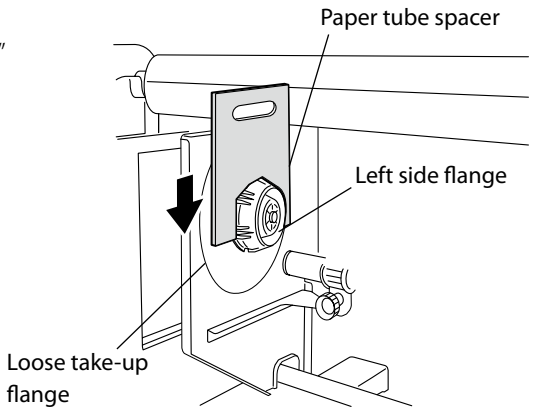
3 Install the take-up paper tube.

Use the paper tube and the paper tube spacer checked in the procedure 2.

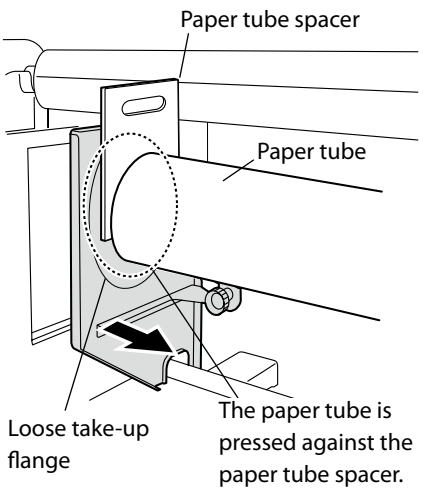
(1) Install the paper tube at the right side flange (fixed side).



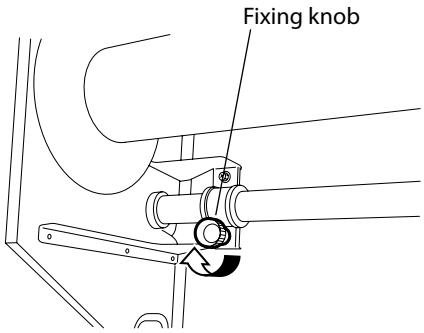
(2) Install the paper tube spacer checked in the procedure "2.(3)" to the left side flange (movable side).



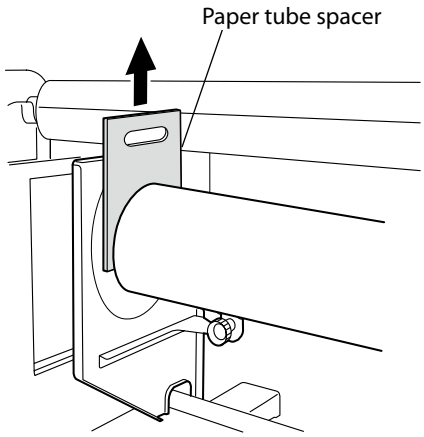
(3) Slide the left side flange (movable side) so that the paper tube is pressed against the paper tube spacer.



(4) Tighten the knob at the left side (movable side) firmly to secure the flange.



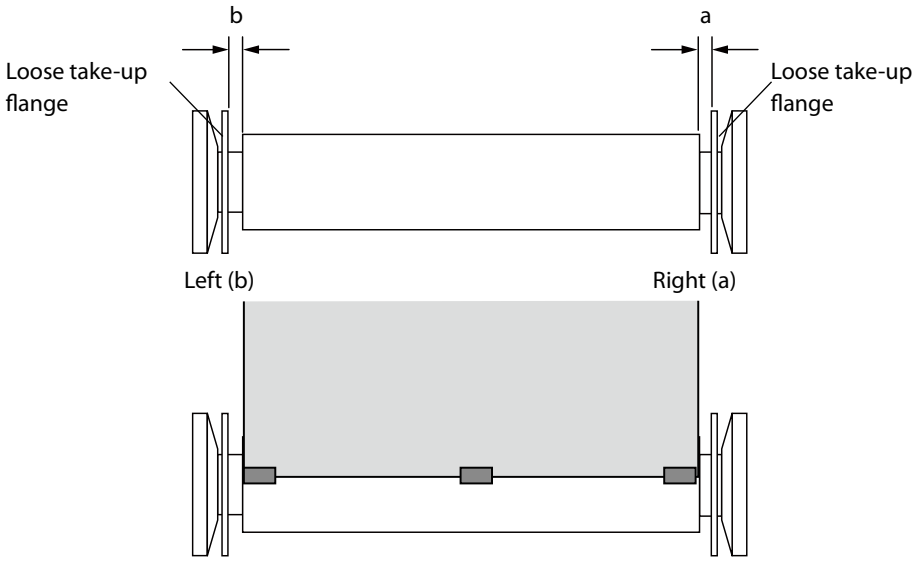
(5) Pull out the paper tube spacer.
Remove the flange spacer set in the procedure "2.(1)".



4 Affix the media.

Affix the media to the paper tube at three locations, right, left and center with adhesive tape.

Check whether the gaps between the loose take-up flange surfaces and the both media ends are appropriate (a+b = below 7 mm). The target length of a is 0-2 mm.

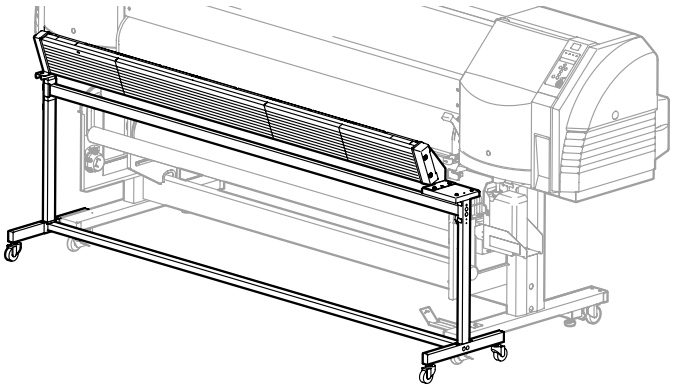


How to use the blower unit (option)

The blower unit (option) is installed to the paper exit side of the printer and is used to effectively dry the printed media (ink) processed by the printer.

Note

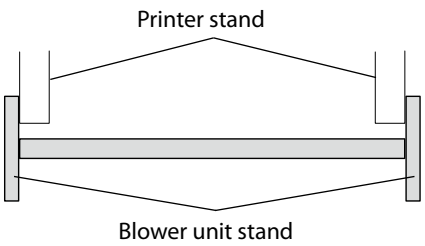
- To dry the printed media (ink) efficiently and to operate the take-up reel unit smoothly, the use of the blower unit is recommended.
  Apply the blower unit when high-speed printing (16m²/h, etc.) or high density printing (with large quantity of ink) is performed.
- IP-182 Blower Unit does not guarantee complete ink drying on all types of media and printing. Check the drying speed of the media in advance. Perform laminating after the ink dries completely.



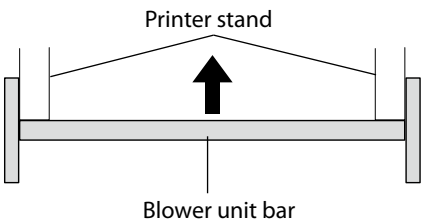
Set the blower unit to the printer

1 Place the blower unit in front of the printer.

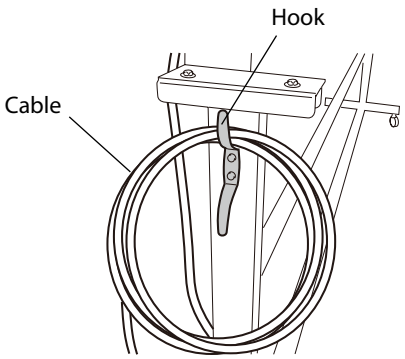
(1) Install the blower unit stand to the outside of the printer stand.



(2) Push the blower unit until the bar touches the printer stand.



2 Wind the cable around the hook.

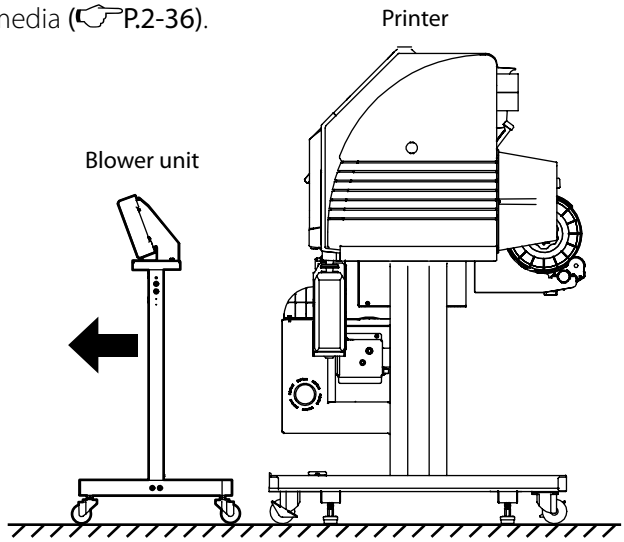


Note

- It takes time for the ink to dry completely. Processing immediately after printing (laminating, etc.) is not recommended.
- The ink may not dry completely on some media. In this case, set the paper scanning wait time (☞P.3-25) from the operation panel of the printer.

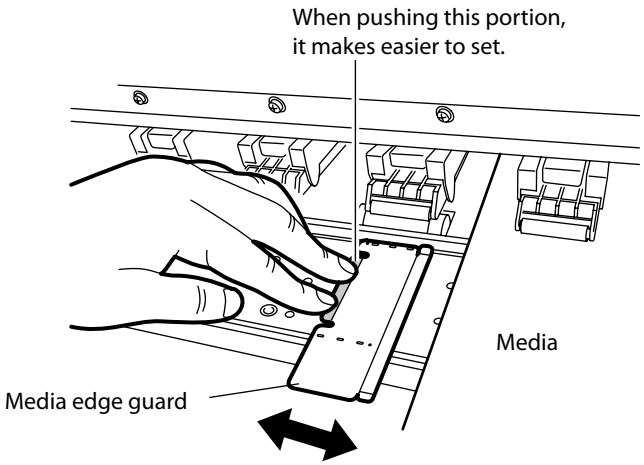
Handling the media

Shift the blower unit to prevent any interference before installing the media to the printer (☞P.2-7), installing the media on the take-up reel unit (☞P.2-16) and cutting the media (☞P.2-36).



How to use the media edge guards

Use the media edge guards protect the Print heads from curl of the sides of the media. Slide the raised (inside) edge of the guards over the edge of the media.



Note

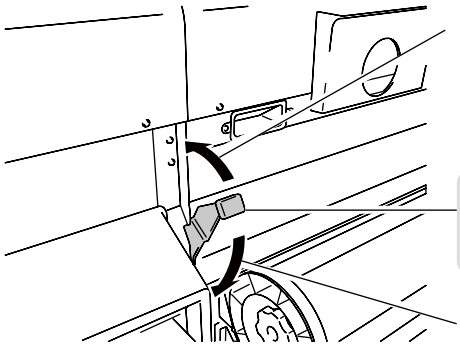
- **Set "use / not-use" of media edge guard in the MEDIA REG MENU. The widths of right and left margins of media change. (☞P.3-28 [(8) EDGE GUARD])**
- **Clean the media edge guards when ink accumulates on them.**
- **The media edge guards will not prevent curl on all media. As it causes the lost print, eliminate waves and folds beforehand.**
- **The media thicker than the media edge guard cannot be used. Do not insert it forcibly.**

HINT The right and left margins of print region is 10 mm when using the media edge guard.

How to switch the pressure

Switch over the pressure between the media feeding pressure roller and the grit roller when using different medias.
The bottom position is normally used. When skew occurs in the media and the media cannot be fed or when the media with weak elasticity such as a thin cloth, switch to [weak] the center position. The pressure force is switched by the position of the pressure roller up / down lever. (See figure below.)

[Rear]

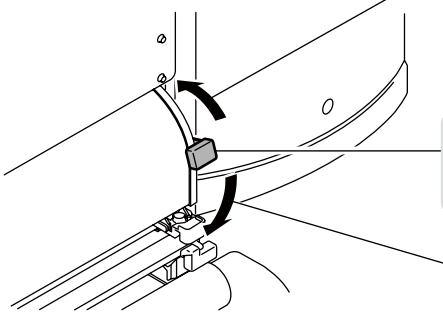


<No pressure> (top)
When loading the media, raise the lever. This the normal UP position.

<Weak> (In the center)
The pressure force becomes weak.

<Normal Pressure> (bottom)
When loading the media, lower the lever. It is the normal DOWN position.

[Front]



<No Pressure> (top)
When loading the media, raise the lever. It is the normal UP position.

<Weak> (In the middle)
The pressure force becomes weak.

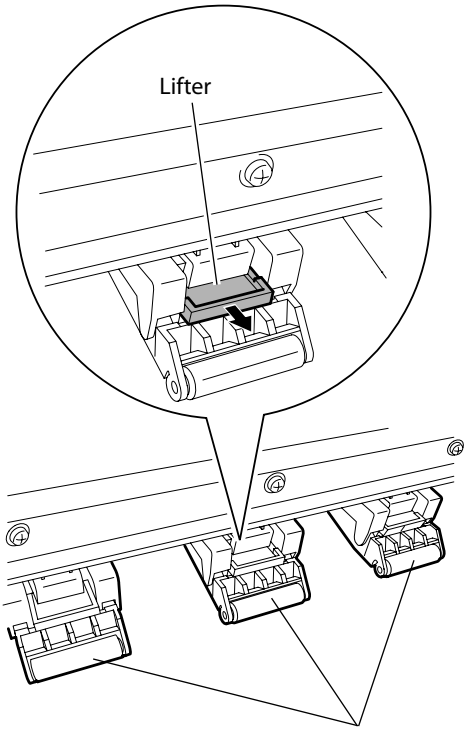
<Normal Pressure> (bottom)
When loading the media, lower the lever. It is the normal DOWN position.

How to use the lifter

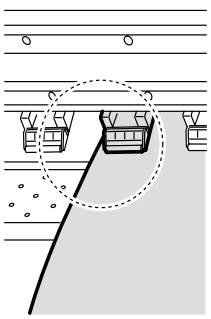
Unless the media is under the entire pressure roller, wrinkles and skews may occur. In such case, pull toward you the lifter at the upper side of pressure roller to release the pressure force of pressure roller.

Note

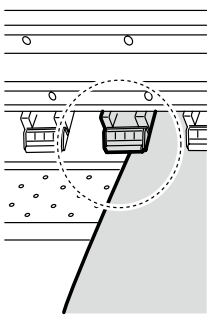
- **Wrinkles may be eliminated in all medias.**



Example of when it is not necessary to pull the lifter toward you (The pressure of pressure roller is needed.)



Example of when pulling the lifter toward you (Releasing the pressure force of pressure roller is needed.)

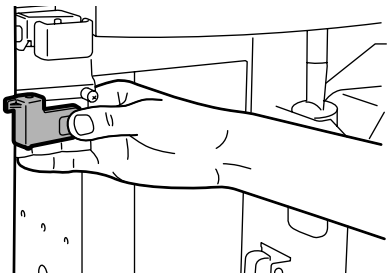


Cut the media

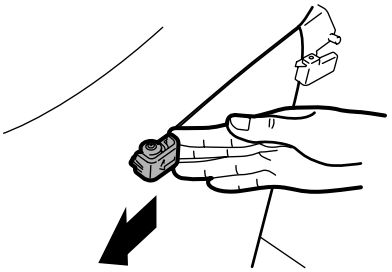
This section describes the procedure to cut the media manually.

HINT - Shift the blower unit to prevent any interference with the operation.

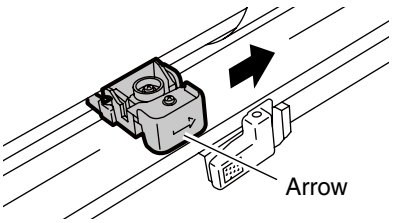
1 Clip both ends of media with the media clip.



2 Move the Media cutter blade and cut the media.

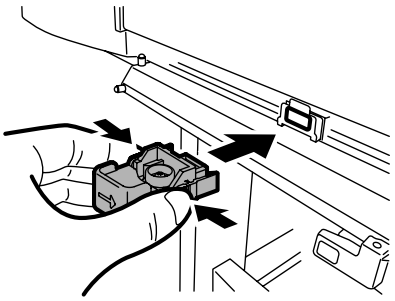


HINT - The arrow mark (→) is imprinted on the Media cutter blade.
The Media cutter blade can only cut in the direction of the media in the arrow mark (→).
If the arrow mark (→) is not oriented in the cutting direction, change the orientation in the procedure below.



1 Hold the side of Media cutter blade by hand and pull it out.

2 Rotate the Media cutter blade so that the left side comes to the right side and then insert it.



Note

- **If the Media cutter gets stuck while cutting, return the cutter blade to the side and check it is not broken. Remove the cause of the binding and cut the media, slowly moving the Media cutter blade. Some medias are hard-to-cut . Do not forcibly cut difficult media. Doing so may be break the blade or cutting performance may be degraded.**
- **If you drop the Media cutter blade, the blade of Media cutter blade may break, resulting in poor cutting performance. Handle it with care.**
- **When cutting, cut debris may be produced. The cut debris may contaminate the printed surface or cause poor cutting.**

Feeding the media [Feed]

This function feeds the media.

1 Set the printer to the offline.
(Press ONLINE key.)

2 Press MENU key to move the menu group to the second layer menu, and then FORM FEED MENU is displayed.

3 Keep pressing ⌄ key.

While pressing ⌄ key, the roll media is fed.
When cut sheet media is used, the paper is ejected.

4 When releasing your hand off ⌄ key, feeding stops, the printer returns to the offline state (menu mode).

HINT
- When the online state (idle mode) is displayed, if ⌄ key is pressed, the media can be fed without entering in the FORM FEED MENU.

Rewind the media [Back Feed]

This function rewinds the media.

1 Set the printer to the offline.
(Press ONLINE key.)

↑INK	MEDIA REG↓
←MEDIA	M.ADV→

2 To display the [REWIND] menu, press MENU key.

↑REWIND	FORM FEED↓
←PH.REC	PH.MAIN→

3 Keep pressing ^ key.

REWINDING MEDIA

While pressing ^ key, the roll media is fed back.

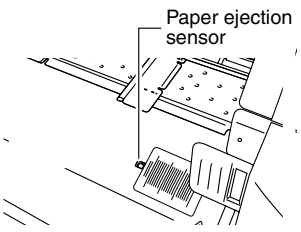
When the cut media is used, the paper is ejected.

4 When releasing your hand off ^ key, feeding stops, the printer returns to the offline state (menu mode).

↑REWIND	FORM FEED↓
←PH.REC	PH.MAIN→

HINT

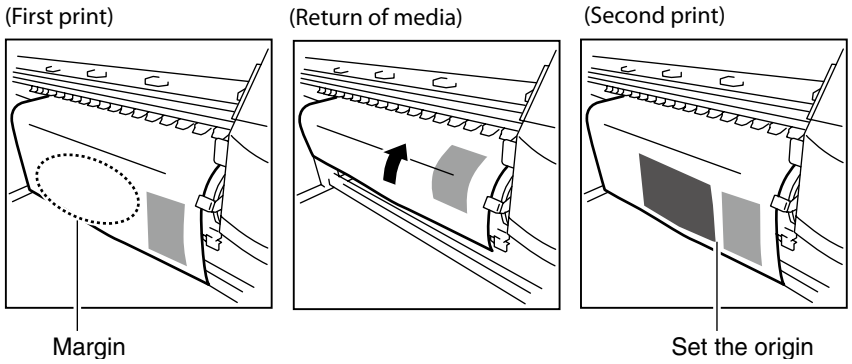
- The paper ejection sensor that detects the presence / absence of media is installed to the front paper guide. If the media covers the paper ejection sensor, the media can be fed back.
  When you keep pressing ^ key, the media can be fed back at a distance of 14 cm at maximum from the paper ejection sensor.
- When the online (idle mode) is displayed, if ^ key is pressed, the media can be fed without entering in the REWIND MENU.



How to use the origin setting function

<Origin setting function>

When printing a small image is printed on the "64" width media, a large margin is created as shown below.
By returning the printed media and re-setting the origin of print start, another image may be printed in this margin.
Re-setting the origin of print is called [Origin setting function]



<Procedure of how to use the origin setting function>

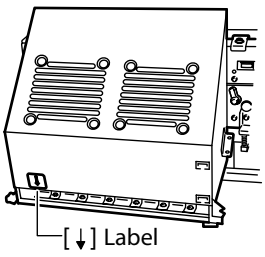
1 Return the media by operating [Back Feed].
(☞**P.2-38 Rewind the media [Back Feed]**)

Note

- **Return the media only after the printed image completely dries. The first printed image will be damaged if this function is used before it is sufficiently dry.**

2 Press and hold the "〈" key for 1.5 seconds in the online state (idle mode), the carriage moves and the origin setting becomes ready

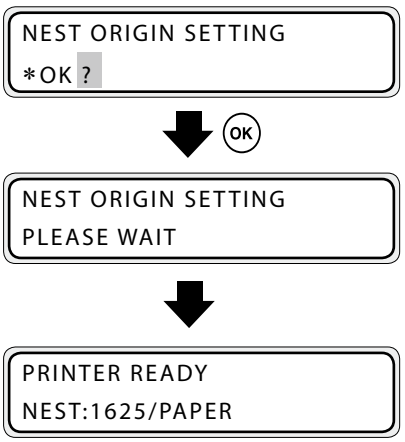
Align the [↓] label on the carriage front with the origin.



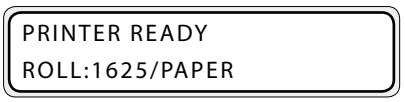
3 In the state of [CARRIAGE MOVING] display, move the carriage to the position to be set as an origin with "(<)" and "(>)" keys.

4 Press (OK) key to set the origin setting.

The carriage returns and the printer becomes ready to print (online state (idle mode) display)



<Display when released>



To release the set origin, keep press and hold the "(>)" key for 1.5 seconds in the idle mode, or raise the pressure roller up / down lever to release the set origin.

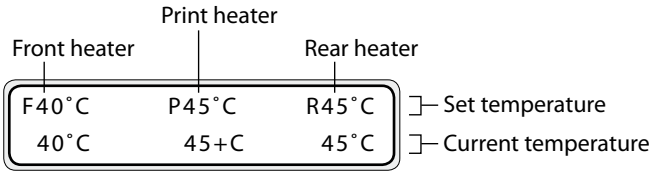
When released, the display returns from [Base] to [Roll] or [Sheet].

Changing temperature using the heater control menu

The heater initial value that is set with MEDIA REG MENU is automatically set for the temperature of each heater. Therefore, the heater control menu is not needed normally.
The heater control menu is used to fine-adjust the heater temperature during printing or to monitor the current heater temperature.

■ Heater control menu display

Press the (HEATER) key to display the heater control menu.



(First print)

■ Key operation in the heater control menu

◁ and ▷ keys	Select a heater for which temperature is to be set.
△ and ▽ keys	Set the heater temperature
(MENU) key	Selects heater ON or OFF.
(OK) key	When this key is pressed for 1.5 seconds while the heater control menu is displayed, all the heaters are forcibly activated and left ON even without print operation.
(CANCEL) key	Pressing this key for 1.5 seconds with the heater control menu displayed cancels the heater-on state made forcibly by the (OK) key. (The heater-on state is canceled and then the printer returns to be under the control of the delay time and standby time settings.)

■ To finish displaying the heater control menu

Press the (HEATER) key while the heater control menu is displayed.

HINT
- Even if heater temperature is changed in the heater control menu, the initial temperature value of each heater stored in MEDIA REG MENU remains unchanged.
- When the temperature unit in SETUP MENU is set to Fahrenheit, every temperature is displayed in Fahrenheit.

■ Reference information on media types and heater settings

The heater set temperatures and reference set values (initial values) of print mode for each type of media are shown in the table below. Change the settings for use according to the media in use.

Media type	Media selection	Recommended heater temperature setting			Print mode
		Print heater	Printheater	Rear heater	
Glossy vinyl chloride	Glossy	45°C	40°C	45°C	Normal1 4-pass bidirectional
Matte vinyl chloride	Matte	45°C	40°C	45°C	Normal1 4-pass bidirectional
Tarpaulin	Banner	45°C	40°C	45°C	Normal1 4-pass bidirectional

It is recommended that temperature of the front heater, print heater, and rear heater be set to less than 50°C, 45°C, and 50°C respectively.

Note

- **Setting a high temperature for the print heater makes ink fusion better, but may cause wrinkles in the media or matte of the print surface. Adjust the heater temperature according to the media type and ambient temperature.**
- **When the print heater is set to a high temperature, the printer lowers the printing speed automatically in some cases to maintain stable print quality.**
- **Set the print heater and rear heater temperatures so that they are nearly +5°C higher than the print heater temperature. Bad temperature balance between print heater/rear heater and print heater may cause wrinkles in the media.**
- **Setting a high temperature for the print heater may cause nozzle-out.**

■ Heater temperature setting procedure

(1) When a media type is selected in media setting, initial temperature values of each heater for the selected media type are displayed on the menu.

→ When the initial temperature value is set, the heater is turned on.
(Heating does not start until print starts.)

→ When the initial temperature value is set to [**], the heater is turned off.
(The heater set temperature is not displayed.)

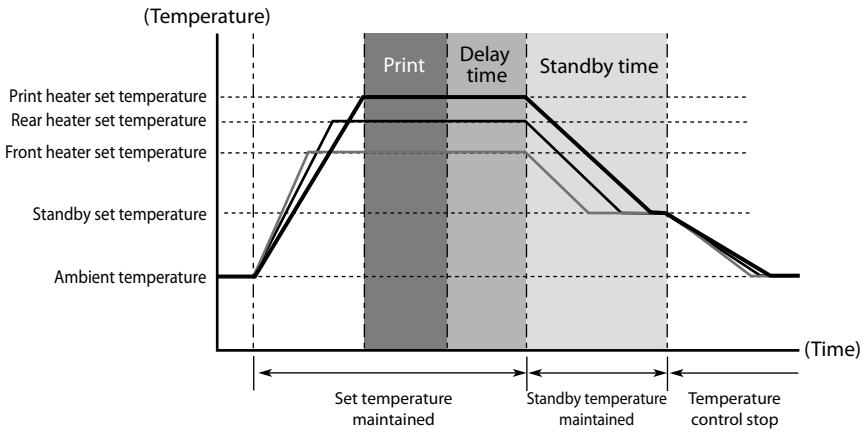
(2) When print data is received from the computer, either of the following is performed before printing.
- The set temperature on the heater control menu is overwritten by the temperature that is set by the RIP (print data, job), and heating starts.
- When no temperature is set by the RIP (print data, job), heating starts with the set temperature on the heater control menu.

(3) When the current temperature of the afterheater, print heater, and the preheater reaches the temperature that is 1°C lower than the set temperature, the printer starts printing.
→ When the current temperature is higher than the set temperature, the printer starts printing before the temperature lowers. The temperature control is performed continuously after printing starts because these heaters keep their set temperature.

(4) The heater temperature varies during printing by changing the set temperature with the heater control menu. Even after printing is completed, the set temperature changed in the heater control menu remains as "set temperature." However, the initial temperature value of each heater stored in MEDIA REG MENU remains unchanged.

(5) The subsequent printing returns to (2).

HINT
- The three heaters work in the state displayed on the LCD regardless of the means to set their temperatures.
- The following figure shows the heater temperature control system for printing. The delay time and standby time can be changed with the heater menu in the offline mode. (☞P.3-59 [Heater menu])



Change the Print head height

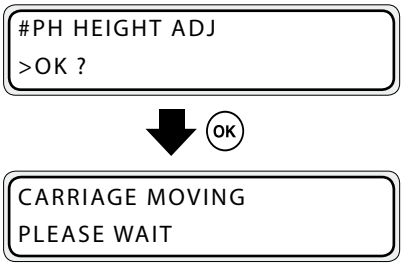
If the Print head strikes the media due to cockling, or printing on a thick media, switch the Print head height to High so it can be used.
To switch the height of Print head, use the head up down mechanism.

1 Set the printer to the offline.
(Press ONLINE key.)

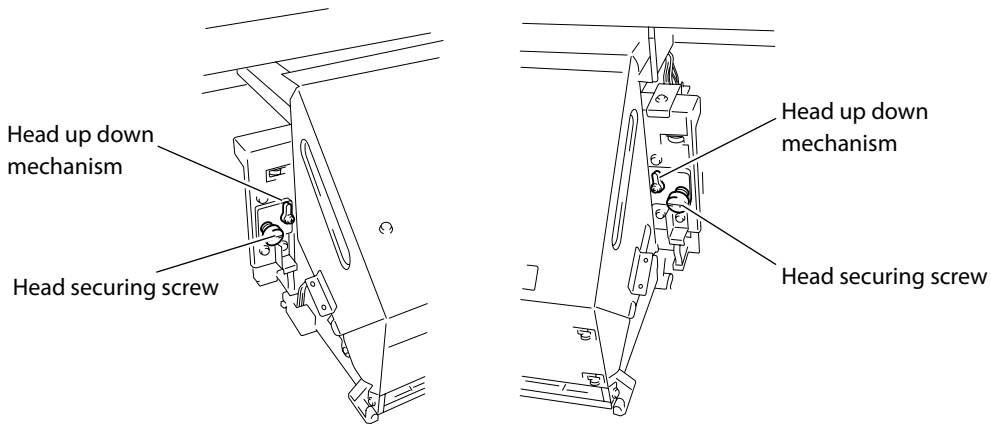
2 Keep pressing MENU key to display PH.MAIN MENU.

3 Press "(>)" key and then (v) key to display [PH HEIGHT ADJ].

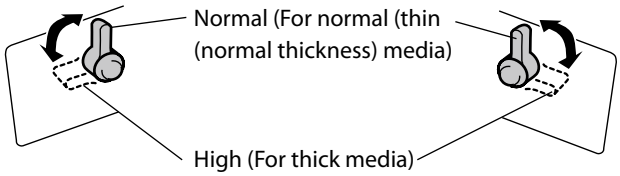
4 Press (OK) key.



5 Open the Front cover and the maintenance cover and loosen two (2) Head securing screws.



6 Switch the height of Print head with the head up down mechanism.



◇ [High] is 0.5 mm higher than [Normal].

[Normal] should be used in most situations.

7 Tighten two (2) fixing screws.

Note

- **Do not move the head up down mechanism with the head securing screws tightened. The head up down mechanism may be broken.**
- **When changing the height of Print head, tighten the head securing screws while pushing lightly the carriage downward.**
- **When changing the height of Print head, change [PH HEIGHT VAL] in the MEDIA REG MENU also. (☞P.3-31[(18) PH HEIGHT VAL]**
- **The print shift may occur in the bi-directional print after changing the height of Print head. If this is the case, adjust the bidirectional position in [BIDIR ADJ] of the MEDIA REG MENU.(☞P.3-32 [(19) BIDIR ADJ1 L] to [(24)BIDIR ADJ3 R]**
- **As the gap between the side plate of printer and the carriage is narrow, if it is hard to reach the head up down mechanism and head securing screws, move the carriage to the right (or the left) by hand.**
- **Confirm that the head securing screws at right and left are tightened. If the head securing screws on the carriage loosen, they may strike the media or edge guard, causing poor image quality and damage to the printer.**

HINT During adjustment of the head height, the warning beep will be heard.
(☞ **P.3-56 [(7) BEEP]**)

Ink cartridge replacement

This section describes [Ink cartridge replacement procedure].
There are three situations requiring ink cartridge replacement:

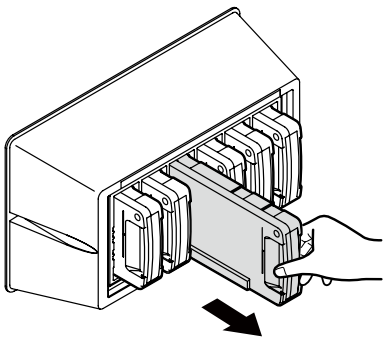
- When the ink cartridge is empty and the ink cartridge needs to be replaced
- When no ink cartridge is installed
- When the ink cartridge is not recognized

Note

- **Do not pull out the ink cartridge until the ink is used up.**
- **Do not pull out the ink cartridge during printing.**
- **Do not touch the green board (IC chip) of ink cartridge.**
- **If, after replacing the ink cartridge lost print data occurs in color of the replaced cartridge, perform the cleaning (normal) after plugging cartridge in and out 2 to 3 times. (☞P.4-19)**

Ink cartridge replacement procedure

1 Pull the ink cartridge out of the printer.

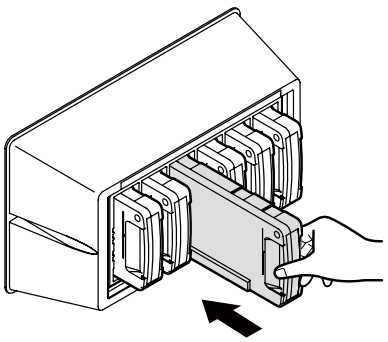


3 Insert the new ink cartridge in the correct slot of color.

Insert the ink cartridge as far as it goes.

The location of ink cartridge installation is determined by its color. (☞**P.1-12 [Ink]**)

Do not attempt to forcibly insert an ink cartridge in the slot of a different color.



4 The replacement is finished.

- If no error occurs, the printer returns to the online state or the offline state.
- If an error occurs, the error message is displayed.

When the ink cartridge is empty and the it needs to be replaced

1 The message is displayed.

```
REPLACE
XX INK CARTRIDGE
```

XX : Ink name

K : Black	C : Cyan
M : Magenta	Y : Yellow
Lm:Light magenta	Lc :Light cyan

2 Replace the ink cartridge described in [Ink cartridge replacement procedure].

When no ink cartridge is installed

1 The message is displayed.

```
INSTALL
XX INK CARTRIDGE
```

XX : Ink name

K : Black	C : Cyan
M : Magenta	Y : Yellow
Lm:Light magenta	Lc :Light cyan

2 Replace the ink cartridge described in [Ink cartridge replacement procedure].

When the ink cartridge is not recognized

1 The message is displayed.

```
CHECK                    nn
XX INK CARTRIDGE
```

XX : Ink name

K : Black	C : Cyan
M : Magenta	Y : Yellow
Lm:Light magenta	Lc :Light cyan

nn :Error code

2 Re-install the ink cartridge described in [Ink cartridge replacement procedure].

Note

- **The unrecognized ink cartridge cannot be used.**
- **If the ink cartridge is re-installed and the message re-appears, contact your dealer or Seiko I Infotech directly.**

Waste ink bottle replacement

This section explains [Waste ink bottle replacement procedure].
There are two situation that require Waste ink bottle replacement procedure:

- When no Waste ink bottle is installed
- When the Waste ink bottle is full

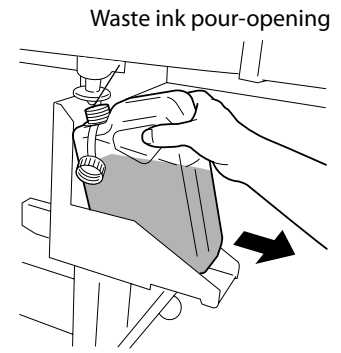
The procedure for each case is described below.

Note

- **Do not replace the Waste ink bottle during printing.**
- **When replacing, use caution not to drip the ink. To prevent ink drips from occurring, cover with paper.**

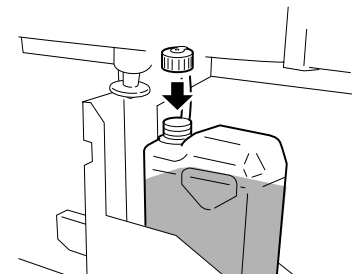
Waste ink bottle replacement procedure

1 Remove the bottle from the waste ink pour-opening (tube) by slightly tilting the fully filled Waste ink bottle.

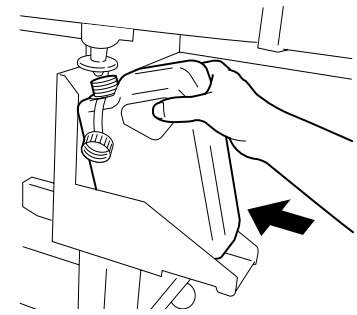


2 Cap the bottle and remove it.

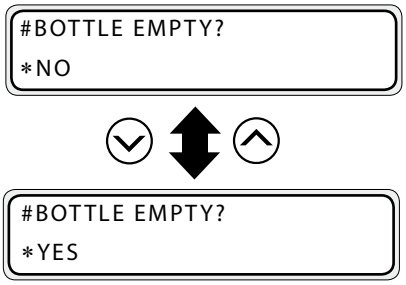
3 Wipe out any ink stains around the Waste ink bottle.



4 Install a new Waste ink bottle.



5 The message is displayed to select the waste ink counter reset (clear).



Note

- **The printer automatically calculates waste ink with a counter and displays the message prompting replacement the Waste ink bottle when the Waste ink bottle is full.**
  There is no visual sensing of the waste ink level. Therefore, if the waste ink counter is reset (set to *YES) and the bottle is not empty, the waste ink may overflow.

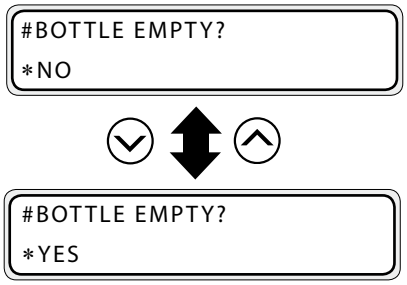
6 Select "BOTTLE EMPTY? * YES" and press (OK) key.

Treatment when no Waste ink bottle is installed

1 The guidance message is displayed.

2 Install a Waste ink bottle. Refer to ☞**P.2-48 [Waste ink bottle replacement]** steps ***1*** to ***4***.

3 The message is displayed to select the waste ink counter reset (clear).



4 Select "BOTTLE EMPTY? * YES" and press (OK) key.

Note

- **If the Waste ink bottle is removed to visually check the level in the Waste ink bottle, select *NO.**

3 Menu of Operation panel

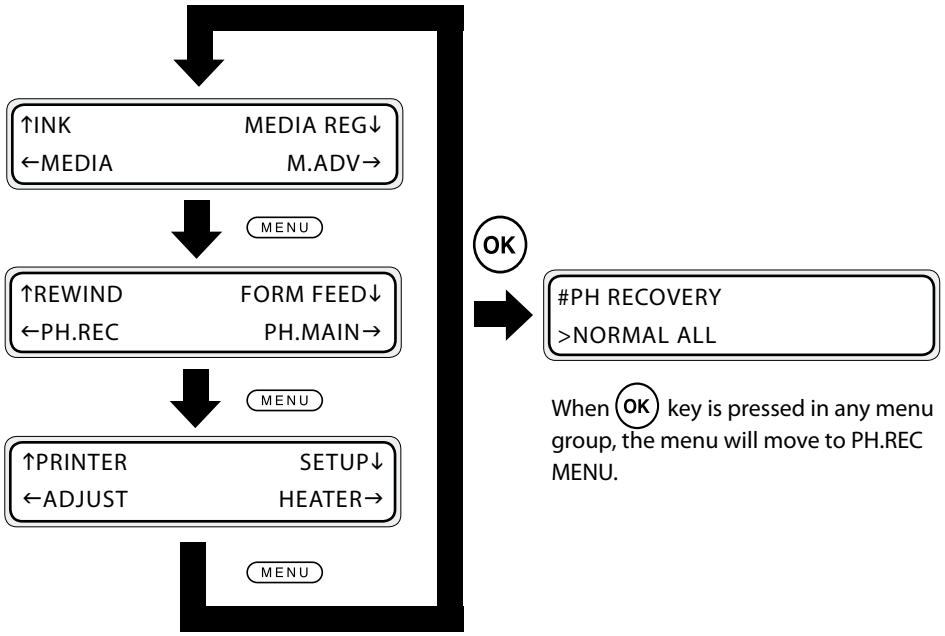
This section explains the basic operation of the operation panel menu, structure and operation in each menu.

(Content in this section)

Basic menu operation in the offline mode.....3-2
Explanation of each menu operation 3-17

Basic menu operation in offline mode

Pressing ONLINE key while the printer is idle displays the following menu on the LCD.



Note

- **If an error is being displayed when ONLINE key is pressed, the printer goes into the offline state.**

Menu layer structure

The menu consists of the following layers.

<First layer menu>

This is the menu group displayed first.
Several menus may exist on the lower layer.

<Second layer menu>

This menu group is under the first layer.

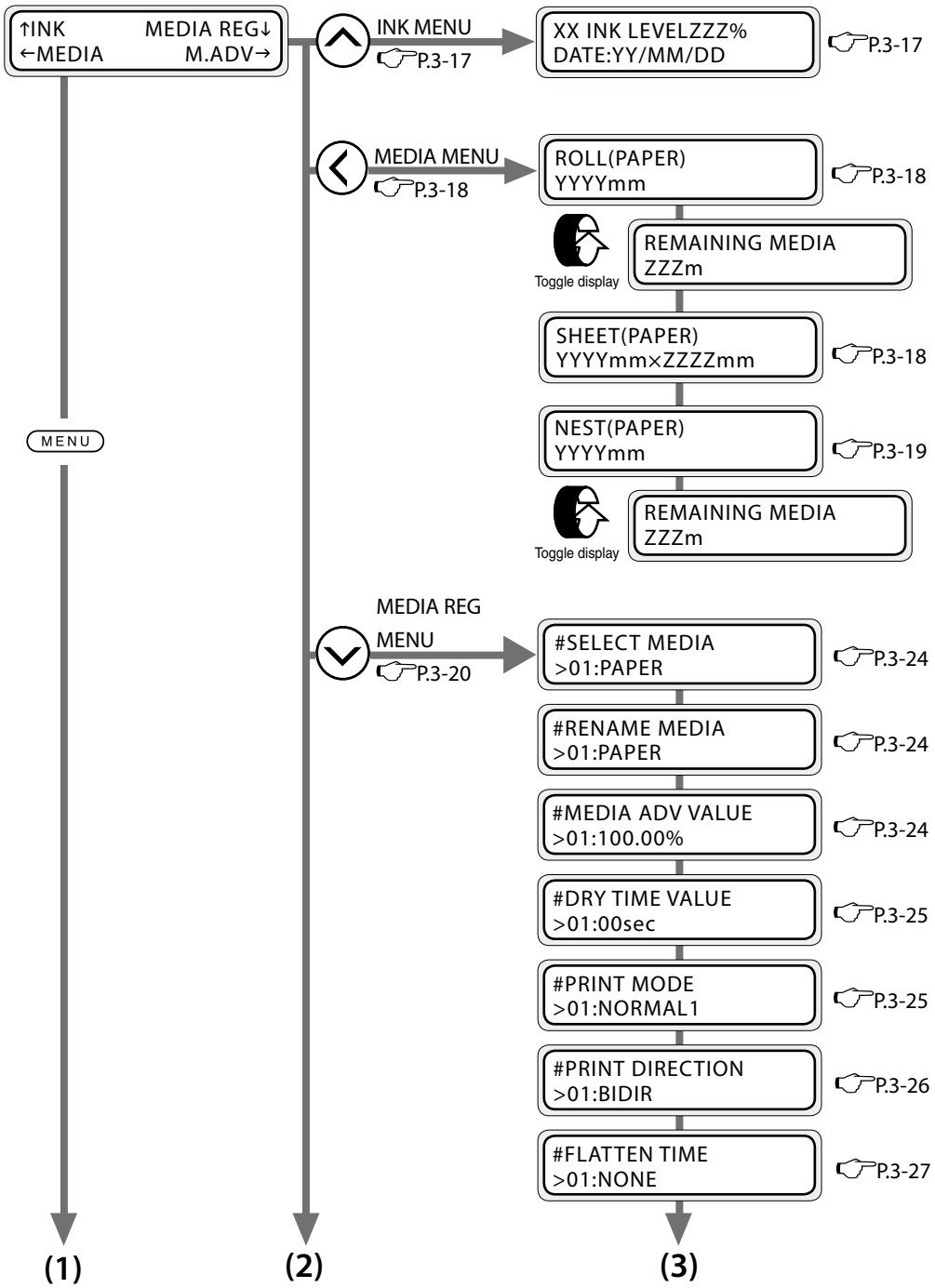
<Third layer menu>

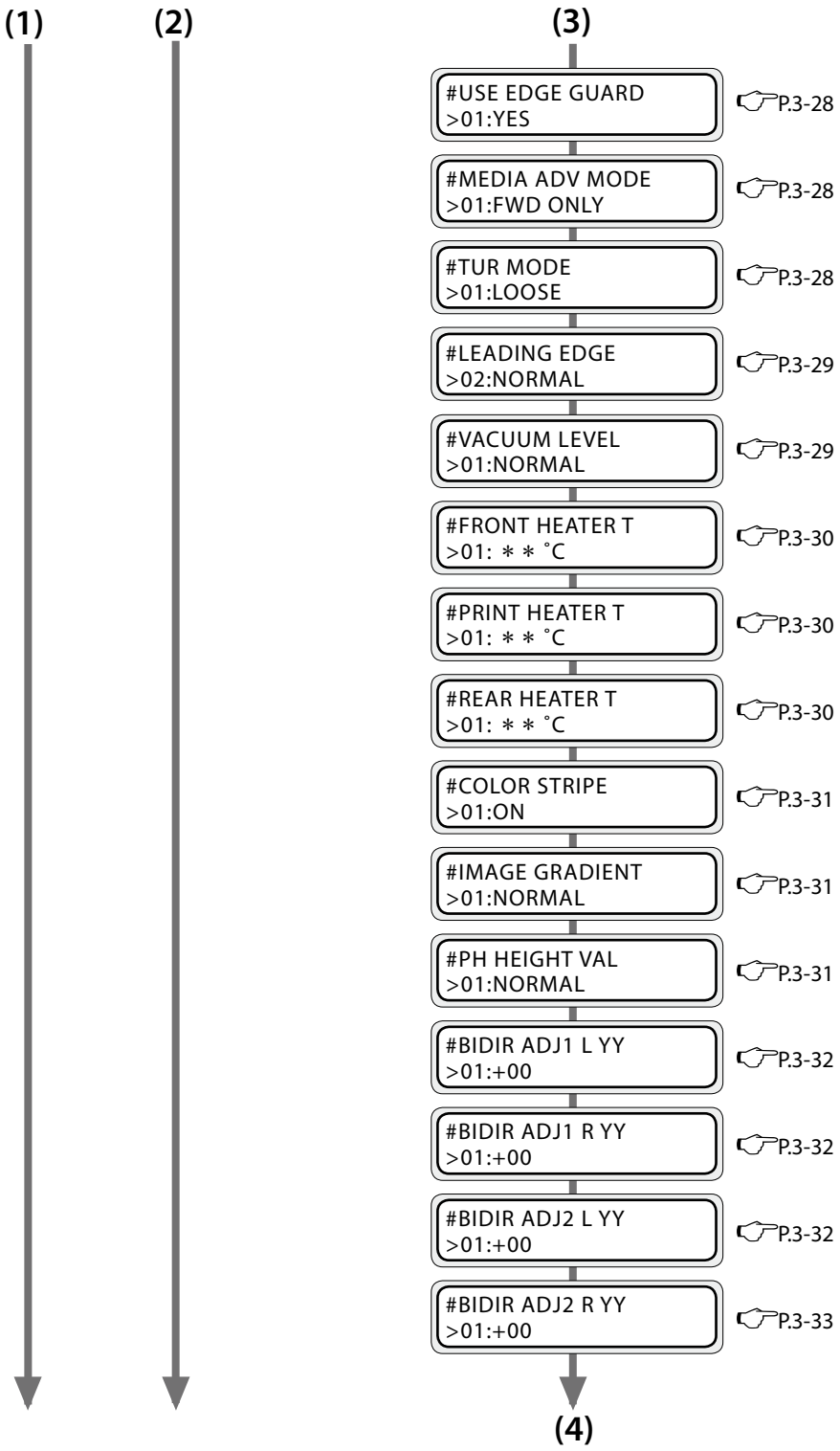
This menu group is under the second layer.

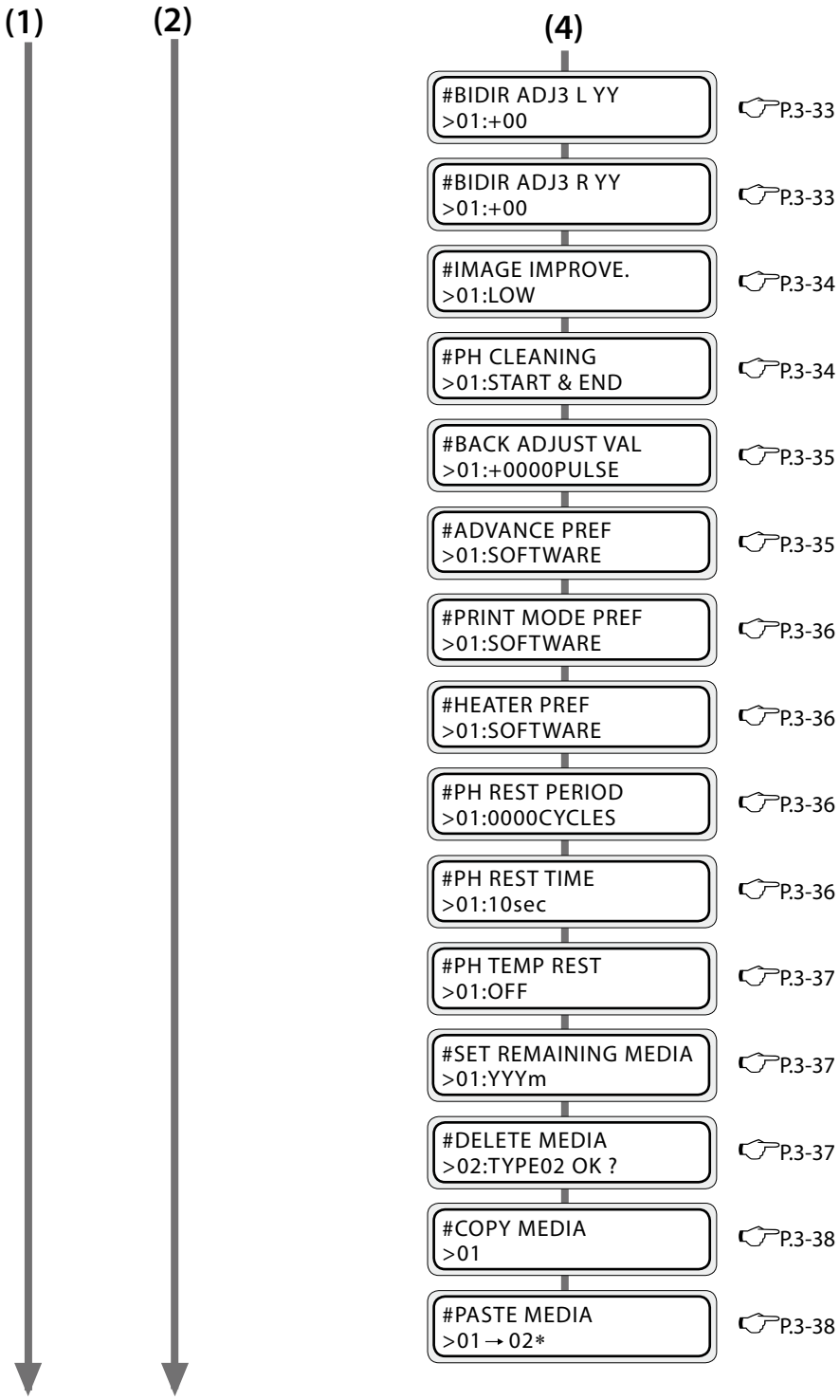
<Parameter>

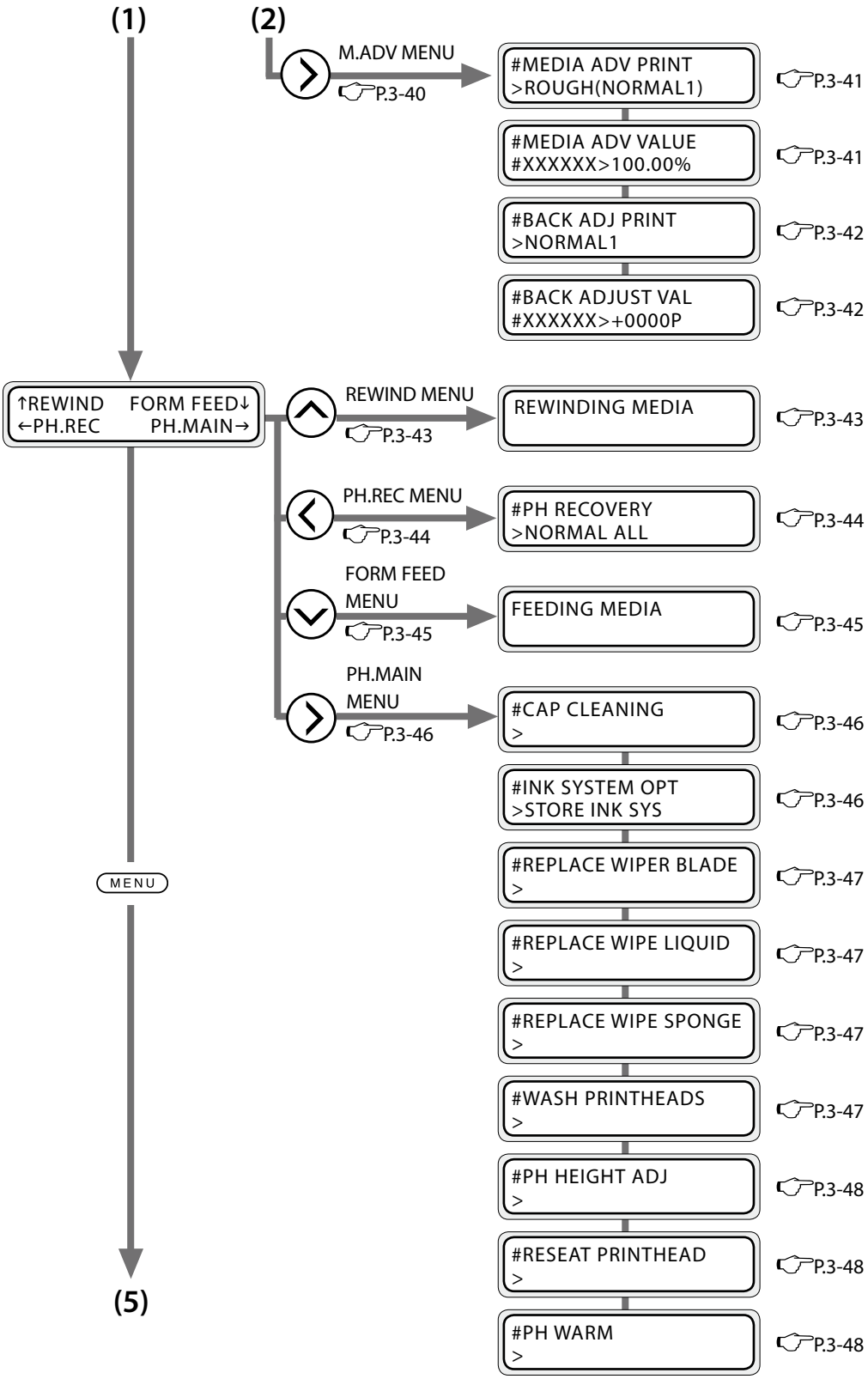
This selection is for items requiring the entry of numerical values.
Inputs include numerical, character and execution.

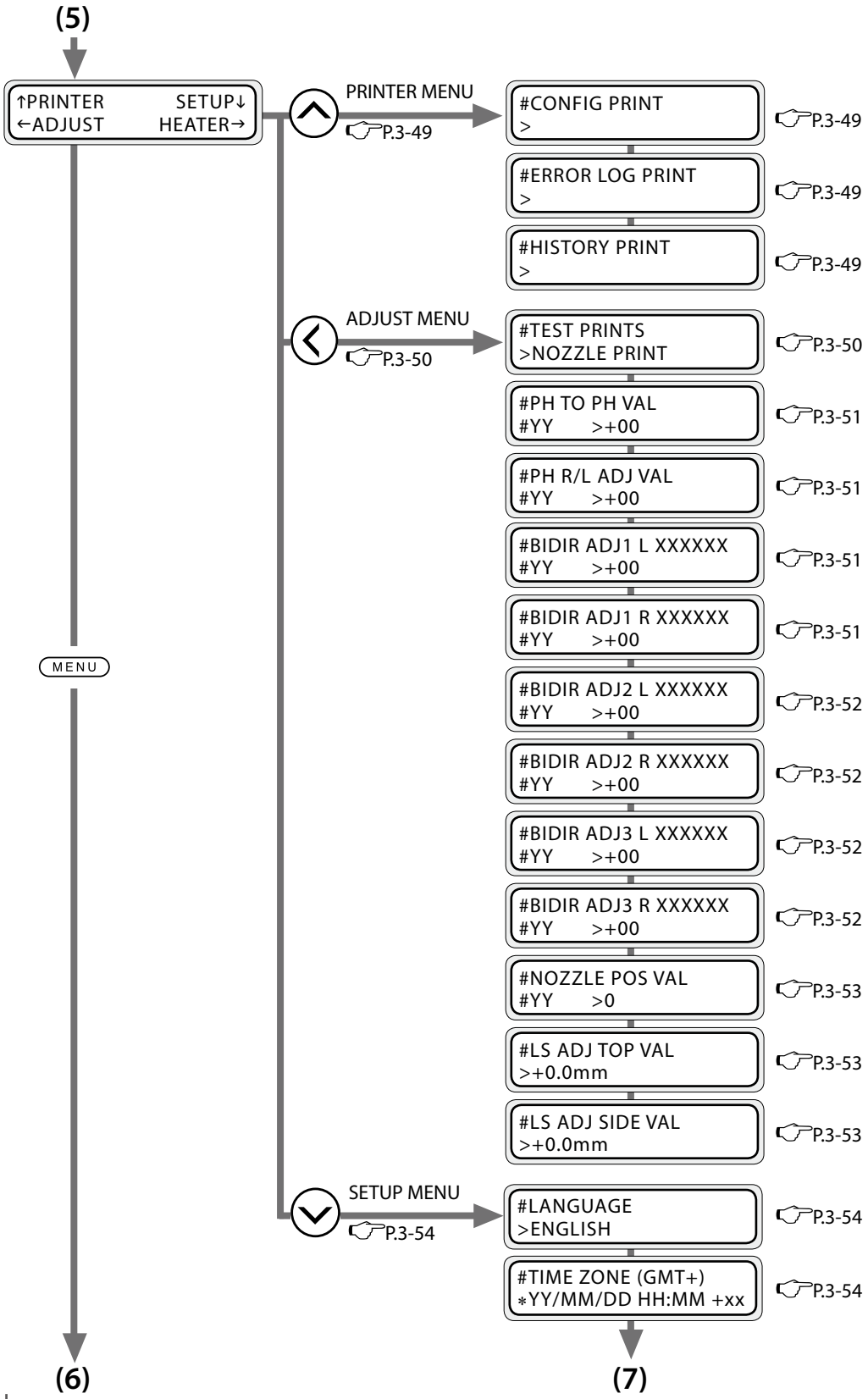
Menu tree

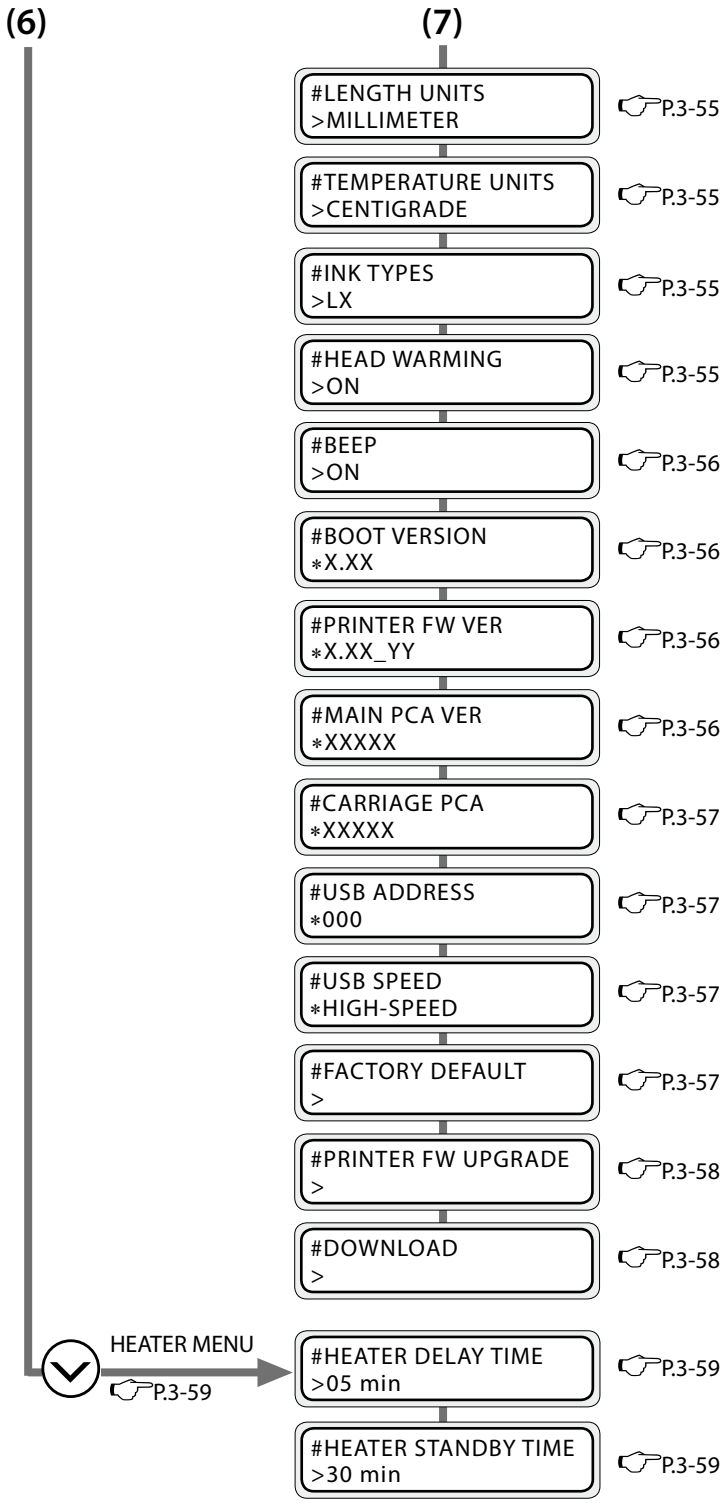

↑INK MEDIA REG↓
←MEDIA M.ADV→
MENU
INK MENU
P.3-17
XX INK LEVELZZZ%
DATE:YY/MM/DD
P.3-17
MEDIA MENU
P.3-18
ROLL(PAPER)
YYYYmm
P.3-18
Toggle display
REMAINING MEDIA
ZZZm
SHEET(PAPER)
YYYYmm×ZZZZmm
P.3-18
NEST(PAPER)
YYYYmm
P.3-19
Toggle display
REMAINING MEDIA
ZZZm
MEDIA REG
MENU
P.3-20
#SELECT MEDIA
>01:PAPER
P.3-24
#RENAME MEDIA
>01:PAPER
P.3-24
#MEDIA ADV VALUE
>01:100.00%
P.3-24
#DRY TIME VALUE
>01:00sec
P.3-25
#PRINT MODE
>01:NORMAL1
P.3-25
#PRINT DIRECTION
>01:BIDIR
P.3-26
#FLATTEN TIME
>01:NONE
P.3-27
(1)
(2)
(3)


(1)
(2)
(3)
#USE EDGE GUARD
>01:YES
P.3-28
#MEDIA ADV MODE
>01:FWD ONLY
P.3-28
#TUR MODE
>01:LOOSE
P.3-28
#LEADING EDGE
>02:NORMAL
P.3-29
#VACUUM LEVEL
>01:NORMAL
P.3-29
#FRONT HEATER T
>01: * * ˚C
P.3-30
#PRINT HEATER T
>01: * * ˚C
P.3-30
#REAR HEATER T
>01: * * ˚C
P.3-30
#COLOR STRIPE
>01:ON
P.3-31
#IMAGE GRADIENT
>01:NORMAL
P.3-31
#PH HEIGHT VAL
>01:NORMAL
P.3-31
#BIDIR ADJ1 L YY
>01:+00
P.3-32
#BIDIR ADJ1 R YY
>01:+00
P.3-32
#BIDIR ADJ2 L YY
>01:+00
P.3-32
#BIDIR ADJ2 R YY
>01:+00
P.3-33
(4)


(1)
(2)
(4)
#BIDIR ADJ3 L YY
>01:+00
☞P.3-33
#BIDIR ADJ3 R YY
>01:+00
☞P.3-33
#IMAGE IMPROVE.
>01:LOW
☞P.3-34
#PH CLEANING
>01:START & END
☞P.3-34
#BACK ADJUST VAL
>01:+0000PULSE
☞P.3-35
#ADVANCE PREF
>01:SOFTWARE
☞P.3-35
#PRINT MODE PREF
>01:SOFTWARE
☞P.3-36
#HEATER PREF
>01:SOFTWARE
☞P.3-36
#PH REST PERIOD
>01:0000CYCLES
☞P.3-36
#PH REST TIME
>01:10sec
☞P.3-36
#PH TEMP REST
>01:OFF
☞P.3-37
#SET REMAINING MEDIA
>01:YYYm
☞P.3-37
#DELETE MEDIA
>02:TYPE02 OK ?
☞P.3-37
#COPY MEDIA
>01
☞P.3-38
#PASTE MEDIA
>01→02*
☞P.3-38


(1)
(2)
M.ADV MENU
P.3-40
#MEDIA ADV PRINT
>ROUGH(NORMAL1)
P.3-41
#MEDIA ADV VALUE
#XXXXXX>100.00%
P.3-41
#BACK ADJ PRINT
>NORMAL1
P.3-42
#BACK ADJUST VAL
#XXXXXX>+0000P
P.3-42
↑REWIND FORM FEED↓
←PH.REC PH.MAIN→
REWIND MENU
P.3-43
REWINDING MEDIA
P.3-43
PH.REC MENU
P.3-44
#PH RECOVERY
>NORMAL ALL
P.3-44
FORM FEED
MENU
P.3-45
FEEDING MEDIA
P.3-45
PH.MAIN
MENU
P.3-46
#CAP CLEANING
>
P.3-46
#INK SYSTEM OPT
>STORE INK SYS
P.3-46
MENU
#REPLACE WIPER BLADE
>
P.3-47
#REPLACE WIPE LIQUID
>
P.3-47
#REPLACE WIPE SPONGE
>
P.3-47
#WASH PRINTHEADS
>
P.3-47
#PH HEIGHT ADJ
>
P.3-48
#RESEAT PRINTHEAD
>
P.3-48
#PH WARM
>
P.3-48
(5)


(5)
↑PRINTER SETUP↓
←ADJUST HEATER→
MENU
(6)
PRINTER MENU
P.3-49
#CONFIG PRINT
>
P.3-49
#ERROR LOG PRINT
>
P.3-49
#HISTORY PRINT
>
P.3-49
ADJUST MENU
P.3-50
#TEST PRINTS
>NOZZLE PRINT
P.3-50
#PH TO PH VAL
#YY >+00
P.3-51
#PH R/L ADJ VAL
#YY >+00
P.3-51
#BIDIR ADJ1 L XXXXXX
#YY >+00
P.3-51
#BIDIR ADJ1 R XXXXXX
#YY >+00
P.3-51
#BIDIR ADJ2 L XXXXXX
#YY >+00
P.3-52
#BIDIR ADJ2 R XXXXXX
#YY >+00
P.3-52
#BIDIR ADJ3 L XXXXXX
#YY >+00
P.3-52
#BIDIR ADJ3 R XXXXXX
#YY >+00
P.3-52
#NOZZLE POS VAL
#YY >0
P.3-53
#LS ADJ TOP VAL
>+0.0mm
P.3-53
#LS ADJ SIDE VAL
>+0.0mm
P.3-53
SETUP MENU
P.3-54
#LANGUAGE
>ENGLISH
P.3-54
#TIME ZONE (GMT+)
*YY/MM/DD HH:MM +xx
P.3-54
(7)



Note

- **The parameter units displayed in each menu is in the SETUP MENU.**
  Length : [LENGTH UNIT] (meter system, inch system) is in the SETUP MENU.

Basic operation procedure and keys used

(1) Set the printer in the menu operable state.

- The menu becomes accessible in the offline state.

(2) Select the menu group.

(^), (v), (<), (>) keys
: These select the desired menu group.

MENU key : This steps to the next menu group on the screen.

(3) Select the menu.

(^), (v) keys : These step through menus on a layer.

(<) Key : The printer returns to the higher menu group.

OK key : The menu is selected and parameters can be changed.

(4) Set or change the parameters.

(^), (v) keys : Parameters are changed with these keys. numerical values are incremented or decremented with these keys.

(<), (>) Keys : Digits are selected with these keys when entering numerical values.

(5) Fixing the set parameter or canceling

OK key : This key completes the parameter change.

CANCEL key : This key cancels the entered parameter and returns the printer to the menu selection state.

(6) Setting finish

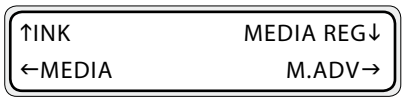
Press ONLINE key to return the printer in the online state.

Procedure to select input, numerical input, execution and character input

■ When the parameter is the selection input method

[PRINT MODE] in the MEDIA REG MENU.

1 With ^, v, <, > keys, select the menu group. Select MEDIA REG MENU with v key.



2 With ^, v keys, select the lower layer menu of MEDIA REG MENU.

Here, select [PRINT MODE].

Press the "<" key, to return the printer to the state in step 1.

3 To change the parameter, press OK key.

4 With ^, v keys, select the parameter for the menu.

Here, select [QUALITY].

5 Press OK key. The parameter change is saved and the printer returns to the state in step 2.

■ **When the parameter is the numeral input method**

[MEDIA ADV VALUE] in M.ADV MENU.

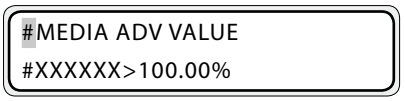
1 With ^, v, <, > keys, select menu group.

With "> " key, select M.ADV MENU.

2 With ^, v keys, select the lower layer menu of M.ADV MENU.

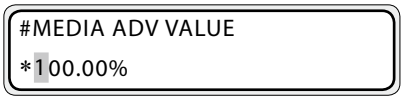
Here, select [MEDIA ADV VALUE].

Press the "< " key, to return the printer to the state in step 1

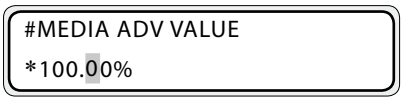


XXXXXX : Media name

3 To change parameter, press OK key.

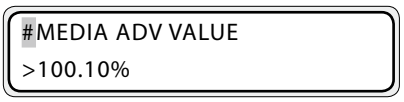


4 With <, > keys, move to the digit to be changed.



5 Press ^, v keys to correct the numeral.

6 Press the OK key. Then, the parameter change is executed and the printer returns to the state in step ***2***.



■ Parameter execution

Case 1 : In case of executing the print

[CONFIG PRINT] in PRINTER MENU.

1 With (^), (v), (<), (>) keys, select the menu group.

With (^) key, select PRINTER MENU.

2 With (^), (v) keys, select the lower layer menu of function menu.

Select [CONFIG PRINT].

Press the "(<)" key, to return the printer to the state in step 1.

3 Press (OK) key.

4 To execute, press (OK) key.

To return the printer to the state in step ***2*** without executing, press CANCEL key.

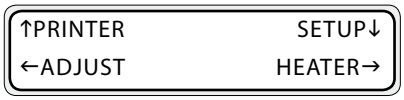
5 After finishing the execution, the printer returns to the state in step ***2***.

Case 2 : Display only

[BOOT VERSION] menu in SETUP MENU.

1 With ^, v, <, > keys, select the menu group.

With v key, select the system menu.



2 With ^, v keys, select the lower layer menu of system menu.

When [BOOT VERSION] is selected, the content is displayed.

*X : BOOT version

3 With ^, v keys, other lower layer menu in SETUP MENU can be selected.

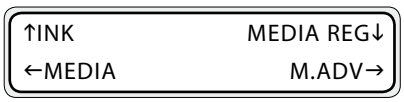
Press the "<" key, to return the printer to the state in step 1.

■ When the parameter is the character input method

MEDIA REG MENU.

1 With ^, v, <, > keys, select the menu group.

With v key, select MEDIA REG MENU.



2 With ^, v keys, select the lower layer menu of MEDIA REG MEN.

Select [RENAME MEDIA MENU].

3 To change the parameter, press OK key.

4 MENU + ^ keys or MENU + v keys, correct the character code group.

With ^ key or v key, correct the character.

(☞Refer to **P3-16 <Character Selection Table>**)

5 With <, > keys, move to the digit to be corrected and correct the character.

6 To fix the setting, press OK key.

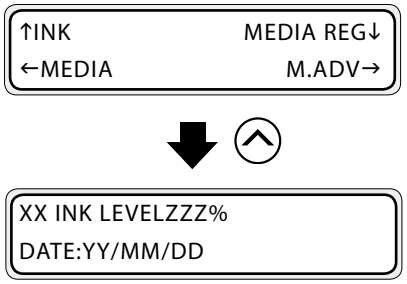
<Character Selection Table>

Character code group		Character (key ⟷ key)
Backward (MENU + key) ↕ Forward (MENU + key)	Symbols	space, !, ••••
	Numerals	0 to 9
	Alphabet • Capital letter	A toZ
	Alphabet • Small letter	a to z
	Special characters	a, ä, b, ••••

Explanation of each menu operation

INK MENU

Displays the ink information. When pressing ^ key, the ink information of each color is displayed in every 3 seconds.



XX :Ink color (Y/M/C/K/Lm/Lc)
ZZZ : Remaining amount of ink
YY :Year, MM : Month DD : Day

The order of display of ink color is Y → M → C → K → Lm → Lc.

(1) INK LEVEL shows the remaining ink.
DATE shows the production date of ink cartridge.

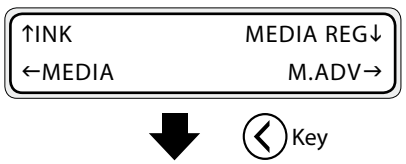
(2) By pressing MENU key, the display can proceed to a next color without resting for 3 seconds.

(3) When pressing CANCEL key or "<" key, the printer returns to offline state (new mode) display.

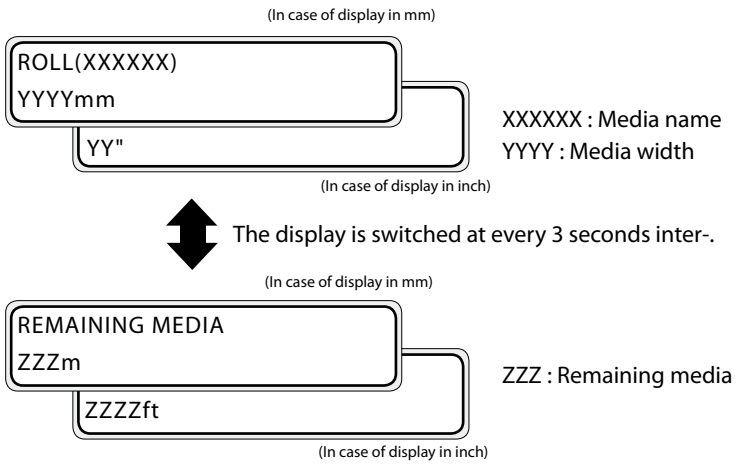
(4) To move to the online state (idle mode) display, press ONLINE key.

MEDIA MENU

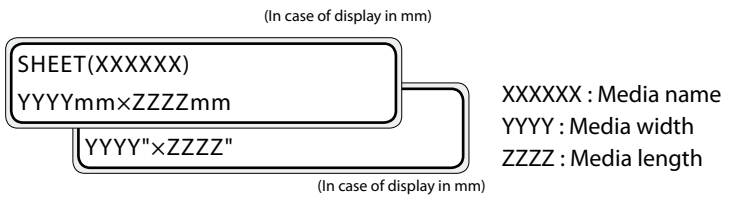
Shows the media information. When pressing "<" key, the media information is displayed.



<For roll media>

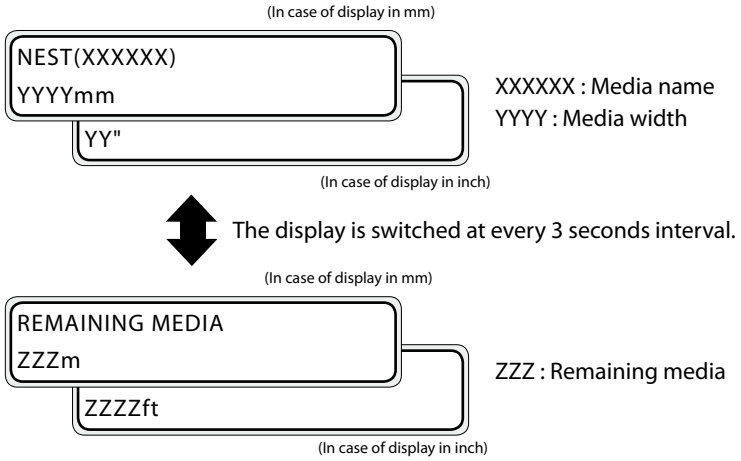


<For cut media (sheet)>



[sheet] does not display the remaining media.

<In case of base (In case of the origin setting with the origin setting function)>



(1) REMAINING MEDIA shows the remaining length of media. When [**] is displayed, the remaining is invalid.

(2) Press CANCEL key and "<" key to return to the offline state (menu mode).

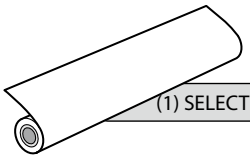
(3) Press ONLINE key to move to the online state (idle mode).

MEDIA REG MENU

Set the parameters used for printing. To set the parameter, press ⌄ key.

⌄ Key

XX : Media number
YY : Media name



HINT Following 20 pieces of media information can be registered in MEDIA REG MENU.

- (1) SELECT MEDIA
- (2) RENAME MEDIA
- (3) MEDIA ADV VALUE
- (4) DRY TIME VALUE
- (5) PRINT MODE
- (6) PRINT DIRECTION
- (7) FLATTEN TIME
- (8) USE EDGE GUARD
- (9) MEDIA ADV MODE
- (10) TUR MODE
- (11) LEADING EDGE
- (12) VACUUM LEVEL
- (13) FRONT HEATER T
- (14) PRINT HEATER T
- (15) REAR HEATER T
- (16) COLOR STRIPE
- (17) IMAGE GRADIENT
- (18) PH HEIGHT VAL
- (19) BIDIR ADJ1 L
- (20) BIDIR ADJ1 R
- (21) BIDIR ADJ2 L
- (22) BIDIR ADJ2 R
- (23) BIDIR ADJ3 L
- (24) BIDIR ADJ3 R
- (25) IMAGE IMPROVE
- (26) PH CLEANING
- (27) BACK ADJUST VAL
- (28) ADVANCE PREF
- (29) PRINT MODE PREF
- (30) HEATER PREF
- (31) PH REST PERIOD
- (32) PH REST TIME
- (33) PH TEMP REST
- (34) SET REMAINING MEDIA

The function to copy the parameters of one media to other media is available.
(☞**P.3-38 [(36) COPY MEDIA], P.3-38 [(37) PASTE MEDIA]**)

■ How to select the media

1 Select the MEDIA REG MENU with (v) key.

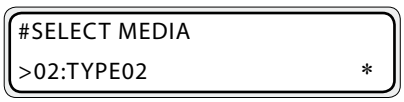
2 Select [SELECT MEDIA] with (^), (v) keys.

When the media is already registered, [*] mark is displayed.

3 To change the parameter, press (OK) key.

4 Select the media number you want to register with (^), (v) keys.

5 Press (OK) key. Then, the media number is fixed and the printer returns to the state in step ***2***.



■ Preset media initial value

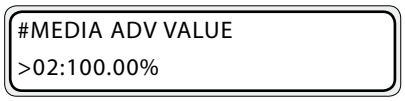
A maximum 20 types (media No. 01 to 20) medias can be saved.
A saved media can be also deleted. However, the media No. 01 (PAPER) cannot be deleted. The initial values are shown below.

Media number / Setting	01	02	03	04	05
Media	PAPER	Glossy	Matte	Banner	BLT_B
MEDIA ADV VALUE	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
DRY TIME VALUE	00 sec	00 sec	00 sec	00 sec	00 sec
PRINT MODE	NORMAL1	NORMAL1	NORMAL1	NORMAL1	NORMAL1
PRINT DIRECTION	BIDIR	BIDIR	BIDIR	BIDIR	BIDIR
FLATTEN TIME	NONE	NONE	NONE	NONE	NONE
EDGE GUARD	YES	YES	YES	YES	YES
MEDIA ADV MODE	FWD ONLY	FWD ONLY	FWD ONLY	FWD ONLY	FWD ONLY
TUR MODE	LOOSE	LOOSE	LOOSE	LOOSE	LOOSE
LEADING EDGE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
VACUUM LEVEL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
FRONT HEATER T	**(OFF)	45˚C	45˚C	45˚C	45˚C
PRINT HEATER T	**(OFF)	40˚C	40˚C	40˚C	40˚C
REAR HEATER T	**(OFF)	45˚C	45˚C	45˚C	45˚C
COLOR STRIPE	ON	ON	ON	ON	ON
IMAGE GRADIENT	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
PH HEIGHT VAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
BIDIR ADJ1 (L)	00	00	00	00	00
BIDIR ADJ1 (R)	00	00	00	00	00
BIDIR ADJ2 (L)	00	00	00	00	00
BIDIR ADJ2 (R)	00	00	00	00	00
BIDIR ADJ3 (L)	00	00	00	00	00
BIDIR ADJ3 (R)	00	00	00	00	00
IMAGE IMPROVE	LOW	LOW	LOW	LOW	LOW
PH CLEANING	START & END	START & END	START & END	START & END	START & END
BACK ADJUST VAL	+0000PULSE	+0000PULSE	+0000PULSE	+0000PULSE	+0000PULSE
ADVANCE PREF	SOFTWARE	SOFTWARE	SOFTWARE	SOFTWARE	SOFTWARE
PRINT MODE PREF	SOFTWARE	SOFTWARE	SOFTWARE	SOFTWARE	SOFTWARE
HEATER PREF	SOFTWARE	SOFTWARE	SOFTWARE	SOFTWARE	SOFTWARE
PH REST PERIOD	0000CYCLES	0000CYCLES	0000CYCLES	0000CYCLES	0000CYCLES
PH REST TIME	10sec	10sec	10sec	10sec	10sec
PH TEMP REST	OFF	OFF	OFF	OFF	OFF

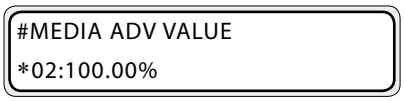
■ How to set the parameter

Here, the entry of the MEDIA ADVANCE VALUE (☞**P.3-24**) in the media number [02] is explained.

1 In the MEDIA REG MENU, display [#MEDIA ADV VALUE] with (^), (v) keys.



2 To change the parameter, press (OK) key and correct the parameter.

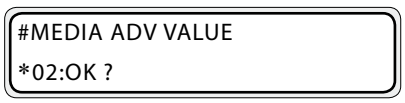


Note

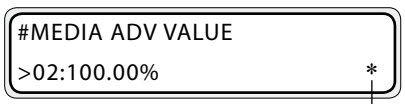
- **Print the advance adjustment pattern select the best MEDIA ADVANCE VALUE. (☞P.4-28)**

3 Press (OK) key. Then, the message is displayed.

(This message is displayed only when a new value is saved.)



4 Save new parameter, media number 02, with (OK) key. "*" (asterisk indicates the current media) is appended to the end of media on the LCD screen and the printer returns to the state in step ***1***.



When the media is already registered, [*] is dis-.

To cancel, press CANCEL key. Then, the new registration stops and the printer returns to the state in step ***1***.

(1) SELECT MEDIA

Select the new registration or the media number of a media of which parameters are corrected. 20 types of media numbers from [01] to [20] can be selected.

```
#SELECT MEDIA
>XX:YYYYYY
```

XX : Selected media number
YYYYYY : Media name

HINT - When entered in the MEDIA REG MENU, the presently set media number is displayed first.
When no media is loaded, the media number [01] is displayed.

<Parameter (selection input)>

01 to 20

(2) RENAME MEDIA

Name the media number selected in the [SELECT MEDIA] (Register)
Six (6) digits of character (or code) can be entered for the media name.
For character string of 6 digits, code, alpha-numeral and KANA can be used.

```
#RENAME MEDIA
>XX:YYYYYY
```

XX : Selected media number
YYYYYY : Media name

<Parameter (Character input)>

6 digit character input (Code, alpha-numeral and other) ☞**P.3-16**

(3) MEDIA ADV VALUE

Set the MEDIA ADVANCE VALUE.
Set the advance value so that banding is eliminated.

```
#MEDIA ADV VALUE
>XX:YYY.YY%
```

XX : Selected media number
YYY. YY : MEDIA ADVANCE VALUE

<Parameter)Numeral input9>

0.97.00 to 103.00 %

Note

For MEDIA ADVANCE VALUE setting, refer to [Section 4 Media advance value setting] (☞P.4-28)

(4) DRY TIME VALUE

Set the paper scanning wait time. The printer goes on to the next scan after the wait time configured for each scan.

```
#DRY TIME VALUE
>XX:00sec
```

XX : Selected media

<Parameter)Numeral input9>

00 to 99	Inputs in unit of second.

(5) PRINT MODE

Select PRINT MODE.

```
#PRINT MODE
>XX:NORMAL1
```

XX : Selected media

<Parameter (Selection Input)>

NORMAL1	(4 passes)
NORMAL2	(4 passes)
QUALITY	(8 passes)
DENSITY	(8 passes)
DRAFT	(2 passes)
FINE DRAFT	(4 passes)

For characteristics of print mode, refer to the list below.

There are 6 types of print mode. Choose the suitable mode to meet the type of media, productivity and image quality.

1. NORMAL1 [productivity + image quality weight] (4 passes)

This the print mode that will mostly be used. The input data of 720 ×720 dpi is printed in the resolution of 720 × 720 dpi. Normally, use this mode.

2. NORMAL2 [image quality weight] (4 passes)

The input data of 720 ×720 dpi is printed in the resolution of 720 × 720 dpi. If getting banding in print in [NORMAL1], use this mode. However, the printing speed is 30 % slower than in [NORMAL1].

3. QUALITY [image quality weight] (8 passes)

Printing is in the same resolution of 720 × 720 dpi as in [NORMAL1/2]. When using a media with low drying speed, if you mind non-uniformity of print, use this mode. However, the printing speed is slowed down to about one half of [NORMAL1].

4. DENSITY [high density print] (8 passes)

This mode is effective when printing transparent media (such as FF, transparent vinyl chloride). The print of 100 % is printed in 200 % at maximum. The printing speed is the same as that of [QUALITY].

5. DRAFT [productivity weight] (2 passes)

Printing is in the resolution of 720 × 360dpi. The printing speed is two times the [NORMAL1]. The print density is light comparing with [NORMAL1]. Depending on the print image, banding of print may be visible. The entire print of 100 % is printed in 50 % of [NORMAL1]. It can be used for checking a layout.

6. FINE DRAFT [productivity + picture quality weight] (4 passes)

Printing is in the resolution of 720 × 540 dpi. The printing speed is the same as that of [NORMAL1]. The image quality of photo is almost identical comparing with [NORMAL1]. As the entire print of 100 % becomes 75 % of that in [NORMAL1], if color density is a problem, use [NORMAL1] mode.

Note

- **The recommended print mode is [NORMAL1]. Use other modes for increased productivity or picture quality depending on customer requirements.**

(6) PRINT DIRECTION

Select the print direction of a media.

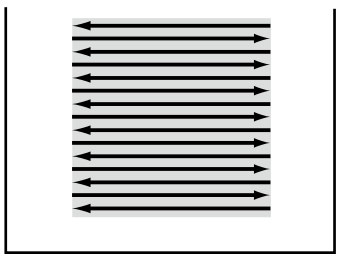
```
#PRINT DIRECTION
>XX:BIDIR
```

XX : Selected media number

<Parameter (selection input)>

BIDIR	Printing occurs in two directions.
UNIDIR	Printing occurs in only one direction.

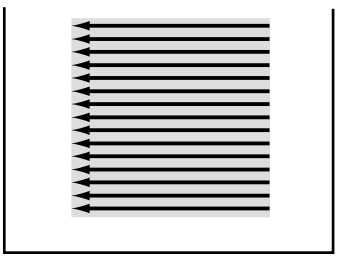
● Bi-direction print



←→: Movement of Print head

: Print image

● Uni-direction print



←: Movement of Print head

: Print image

(7) FLATTENING

Select the MEDIA FLATTEN TIME.
If the printer with the media installed sets for a long period of time, the leading edge of roll media can wrinkle, resulting in the heads striking the print. This can be due to humidity or dust. To avoid this, use this function.

```
#FLATTEN TIME
>XX:NONE
```

XX : Selected media number

Set the parameters for flatten time setting based on the operating conditions.
When the printer is setting without receiving data, after the set time passes, the leading edge of roll media is automatically advanced in the front of the Front cover. (When the leading edge of roll media already is present in front of the front panel, this action is omitted.)
After printing starts, the media flattening (repeated actions of advancing and rewinding the media) is automatically performed.
Moreover, when the power is turned off, the leading edge of roll media is automatically advanced in front of the Front cover and the power is shut down.
(When using the media take-up reel unit, the power is shut down without flattening.)

<Parameter (selection input)>

NONE	This operation is not performed. When printing continuously or when using the wrinkle-free media, select this item. But, when the printer rests, the media could be wrinkled or damage to the print may occur.
30 min	After 30 minutes passes, this operation is performed. In case of less than 30 minutes, before the print starts, every time the media flattening is performed. When printing in high humidity environment and the media wrinkles frequently, set the parameter to this.
1 hour	After 1 hour passes, this operation is performed. When the interval between prints is 1 hour and the media wrinkles frequently, set the parameter to this.
2 hours	After 2 hours pass, this operation is performed. When the interval between prints is 2 hours and the media wrinkles frequently, set the parameter to this..
4 hours	After 4 hours pass, this operation is performed. When the interval between prints is 4 hours and the media wrinkles frequently, set the parameter to this.

(8) EDGE GUARD

Select whether the media edge guards are used or not.
With this setting, the right and left margins of media change.

```
#USE EDGE GUARD
>XX:YES
```

XX : Selected media number

<Parameter (selection input)>

YES	Set when the edge guards are used.
NO	Set when the edge guards are not used.

HINT - When the edge guards are used, the right and left margins of print are 10 mm. When not used, the right and left margins are 5 mm.

(9) MEDIA ADV MODE

Select a media advance mode.

```
#MEDIA ADV MODE
>XX:FWD ONLY
```

XX : Selected media number

<Parameter (selection input)>

FWD ONLY	Media is fed in the normal media advance sequence.
BACK & FWD	Media is fed in the media adhesion prevention sequence. At the beginning of printing, media peeling is performed during feeding when the pause mode is cancelled.

(10) Take-up (TUR) MODE

Select the take-up (TUR) mode when winding the media with the take-up

```
#TUR MODE
>XX:LOOSE
```

XX : Selected media number

<Parameter (selection input)>

LOOSE	The take-up is in the loose (slack) mode.
TENSION	The take-up is in the tension mode.

Note

- Select [LOOSE] when the take-up (TUR) is not used.

(11) LEADING EDGE

Detects the edge of the media when replacing or setting the media, and selects whether the media should be returned to the waiting position.
When the take-up reel unit used, the media will not be returned to the waiting position regardless of this setting.

```
#LEADING EDGE
>XX:NORMAL
```

XX : Selected media number

<Parameter (selection input)>

NORMAL	Detects the media width when replacing or setting the media, and then completes the media setting after checking media skew during media feeding.
DEDUCED	Detects the media width at replacing or setting the media and then completes the media setting after detecting the edge of the media during media rewinding.

Note

Usually set [NORMAL] when selecting [REDUCED,] take care of the followings.

- **Cut the edge of the media so that the edge of the media is parallel to the guide line and set it to the printer.**
  If the edge of the media is not parallel, the print is missed on the edge of the media and the platen is stained by ink and the media jam is caused.
- **Set the media after checking no tape or glue or the edge of the media. If using the media with tape or glue, it causes media jam.**

(12) VACUUM LEVEL

Select the force (speed of fan) to draw the media to the platen.

```
#VACUUM LEVEL
>XX:NORMAL
```

XX : Selected media number

<Parameter (selection input)>

NORMAL	Draws the media by normal amount of force.
LOW	Draws the media by with less than normal amount of force.

Note

- **When thin media (cloth) wrinkles, select [LOW].**
- **When [LOW] is selected, the airflow of the blower unit also becomes low.**

(13) FRONT HEATER T

Set the front heater temperature. However, when "**" is set, the front heater does not work.

(When temperature unit is Centigrade)

```
#FRONT HEATER T
>XX:30˚C
```

(When temperature unit is Fahrenheit)

```
#FRONT HEATER T
>XX:086˚F
```

<Parameter (numeral input)>

15˚C to 55˚C	Centigrade temperature setting range
59˚F to 131˚F	Fahrenheit temperature setting range

(14) PRINT HEATER T

Set the print heater temperature. However, when "**" is set, the print heater does not work.

(When temperature unit is Centigrade)

```
#PRINT HEATER T
>XX:30˚C
```

(When temperature unit is Fahrenheit)

```
#PRINT HEATER T
>XX:086˚F
```

<Parameter (numeral input)>

15˚C to 55˚C	Centigrade temperature setting range
59˚F to 131˚F	Fahrenheit temperature setting range

(15) REAR HEATER T

Set the rear heater temperature. However, when "**" is set, the rear heater does not work.

(When temperature unit is Centigrade)

```
#REAR HEATER T
>XX:30˚C
```

(When temperature unit is Fahrenheit)

```
#REAR HEATER T
>XX:086˚F
```

<Parameter (numeral input)>

15˚C to 55˚C	Centigrade temperature setting range
59˚F to 131˚F	Fahrenheit temperature setting range

HINT - Switching the display between Centigrade temperature and Fahrenheit temperature is performed with (4) Temperature Unit in SETUP MENU. (☞**P.3-55**)

Centigrade/Fahrenheit conversion formula

F=(9/5)C+32

C=(5/9)(F-32)

(16) COLOR STRIPE

Select whether the color stripe is printed or not.

```
#COLOR STRIPE
>XX:ON
```

XX : Selected media number

<Parameter (selection input)>

ON	The color stripe is added.
OFF	The color stripe is not added.

- When experiencing loss of print data (clogged nozzles) on long prints. Add the color stripe and print.
- Irrespective of this setting, the color stripe is added in the various adjustment patterns in the offline mode.
- When the color stripe to ON, the print region becomes narrower by about 20 mm.

(17) IMAGE GRADIENT

Set the image gradient.

```
#IMAGE GRADIENT
>XX:NORMAL
```

XX : Selected media

<Parameter (selection input)>

NORMAL	Use this usually.
HIGHLIGHT1	Use this when the edge of the printed image is blurred.
HIGHLIGHT2	Use this when the symptom is not improved with HIGHLIGHT1.

Note

- **The image quality improvement decreases the print speed as follows compared to IMAGE GRADIENT NORMAL.**
  HIGHLIGHT1: 0% to 24% of the image quality at IMAGE GRADIENT NORMAL.
  HIGHILIGHT2: 20% to 35% of the image quality at IMAGE GRADIENT NORMAL.

- For applying IMAGE GRADIENT and checking its effect, refer to [How to get good image quality] (☞**P.5-15**)

(18) PH HEIGHT VAL

Select the head height.

```
#PH HEIGHT VAL
>XX:NORMAL
```

XX : Selected media

<Parameter (selection input)>

NORMAL	Use this setting in normal operation.
HIGH	Use this setting when the carriage is set to the HIGH position.

Note

- **Select when changing the head height at the printer side. (☞P.2-44)**

(19) BIDIR ADJ1 L

Adjust the value of placement for printing in two directions for each color.
When printing in the print mode other than [NORMAL2] and [FINE DRAFT], set the value of shuttle correction.
Display order Y → M → C → K → Lm → Lc

```
#BIDIR ADJ1 L YY
>XX:+00
```

YY : Ink color
XX : Selected media

<Parameter (numeral input)>

±, -32 to +31

Note

- **For selecting values of correction values, refer to [Section 4 Head position adjustment]. (☞P.4-33)**

(20) BIDIR ADJ1 R

When printing in the print mode other than [NORMAL2] and [FINE DRAFT], set the value of shuttle correction.
Display order Y → M → C → K → Lm → Lc

```
#BIDIR ADJ1 R YY
>XX:+00
```

YY : Ink color
XX : Selected media

<Parameter (numeral input)>

±, -32 to +31

Note

- **For selecting values of correction values, refer to [Section 4 Head position adjustment]. (☞P.4-33)**

(21) BIDIR ADJ2 L

When printing in [NORMAL2], set the value of shuttle correction.
Display order Y → M → C → K → Lm → Lc

```
#BIDIR ADJ2 L YY
>XX:+00
```

YY : Ink color
XX : Selected media

<Parameter (numeral input)>

±, -32 to +31

Note

- **For selecting values of correction values, refer to [Section 4 Head position adjustment]. (☞P.4-33)**

(22) BIDIR ADJ2 R

When printing in [NORMAL2], set the value of shuttle correction.

Display order Y → M → C → K → Lm → Lc

```
#BIDIR ADJ2 R YY
>XX:+00
```

YY : Ink color
XX : Selected media

<Parameter (numeral input)>

±, -32 to +31

Note

- **For selecting values of correction values, refer to [Section 4 Head position adjustment]. (☞P.4-33)**

(23) BIDIR ADJ3 L

When printing in [FINE DRAFT], set the value of shuttle correction.

Display order Y → M → C → K → Lm → Lc

```
#BIDIR ADJ3 L YY
>XX:+00
```

YY : Ink color
XX : Selected media

<Parameter (numeral input)>

±, -32 to +31

Note

- **For selecting values of correction values, refer to [Section 4 Head position adjustment]. (☞P.4-33)**

(24) BIDIR ADJ3 R

When printing in [FINE DRAFT], set the value of shuttle correction.

Display order Y → M → C → K → Lm → Lc

```
#BIDIR ADJ3 R YY
>XX:+00
```

YY : Ink color
XX : Selected media

<Parameter (numeral input)>

±, -32 to +31

Note

- **For selecting values of correction values, refer to [Section 4 Head position adjustment]. (☞P.4-33)**

(25) IMAGE IMPROVEMENT

Select whether to automatically correct the print quality or not.

```
#IMAGE IMPROVE.
>XX:OFF
```

XX : Selected media number

<Parameter (numeral input)>

OFF	Automatic correction is not performed.
LOW	Automatic correction is performed.
MEDIUM	Automatic correction is performed. Use this when the symptom is not improved with LOW.
HIGH	Automatic correction is performed. Use this when the symptom is not improved with LOW and MEDIUM.

Note

- **If a part (characters or halftone) of an image is disturbed due to excessive automatic correction, set this mode to OFF and be sure to adjust the media advance correction value.**
- **The image quality improvement decreases the print speed as follows compared to IMAGE IMPROVE OFF.**
  LOW: 7% of the image quality at IMAGE IMPROVE OFF.
  MEDIUM: 20% to 35% of the image quality at IMAGE IMPROVE OFF.
  HIGH: 50% of the image quality at IMAGE IMPROVE OFF.

HINT - For applying IMAGE IMPROVE and checking its effect, refer to [How to get good image quality](☞**P.5-15**)

(26) PH CLEANING

This function is to keep the print heads clear of debris and dried ink to maintain print quality.

```
#PH CLEANING
>XX:START & END
```

XX : Selected media number

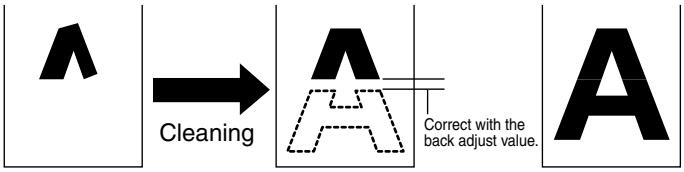
<Parameter <numeral input)>

START & END	This mode executes cleaning automatically at the start or end of a print, depending on print history.
DURING PRNT	This mode executes cleaning automatically at a certain interval during printing.
DURING PRNT2	This mode executes cleaning automatically at a certain interval during printing.

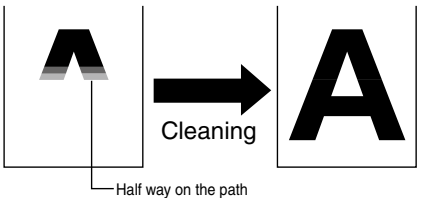
Note

- **After cleaning is executed during printing using [DURING PRNT] mode, a splicing line may appear on the print-out.**
  To eliminate the splice line, see ☞P.3-35 [(27) BACK ADJUST VAL].
  Sometimes, due to the media or printed image, a splice line will still appear in the print. In this case, use the [START & END] or [DURING PRNT2] modes.

- **With [DURING PRNT2] mode, cleaning is executed during printing. Splices are matched better than [DURING PRNT]. But, colors at before and after the splice may change. Select the mode suitable for media characteristics and print image.**



- **When [DURING PRNT] is selected, if [TUR MODE](☞P.3-28) of take-up is set to [TENSION](☞P.3-28) , the same operation as [START & END] mode is performed.**



(27) BACK ADJUST VAL

Set the back adjust value of the media. The splice line of two images divided by performing the auto cleaning (PH CLEANING [DURING PRNT] during printing is corrected.

```
#BACK ADJUST VAL
>XX:+0000PULSE
```

XX : Selected media number

<Parameter (numeral input)>

+/– 2000 pulses (Unit : about 3.5 µm)

(28) ADVANCE PREF

Select the ADVANCE PREFERENCE of MEDIA ADVANCE VALUE.

```
#ADVANCE PREF
>XX:SOFTWARE
```

XX : Selected media number

<Parameter (numeral input)>

SOFTWARE	Data (value) sent from RIP of computer is the controlling source.
FRONT PANEL	The value set in the MEDIA REG MENU (or M.ADV MENU) of printer is the controlling source.

(29) PRINT MODE PREF

Select the print mode preference.

```
#PRINT MODE PREF
>XX:SOFTWARE
```

XX : Selected media number

<Parameter (numeral input)>

SOFTWARE	Data (print mode) sent from RIP of computer is the controlling source
FRONT PANEL	The print mode set in the MEDIA REG MENU of printer is the controlling source.

(30) HEATER PREF

Select the heater preference.

```
#HEATER PREF
>XX:SOFTWARE
```

XX : Selected media number

<Parameter (numeral input)>

SOFTWARE	Data (print mode) sent from RIP of computer is the controlling source
HEAT PANEL	The print mode set in the MEDIA REG MENU of printer is the controlling source.

(31) PH REST PERIOD

Scanning of printer head rests at a certain print length interval while printing.
Use this setting to prevent loss of printed data during a print. Normally, set it to [0000CYCLES].

```
#PH REST PERIOD
>XX:0000CYCLES
```

XX : Selected media number

HINT
- Set the number of scan for print length in the [(31) PH REST PERIOD].
- Set the rest time in the [(32) PH REST TIME].

<Parameter (numeral input)>

0000 to 9999	[0] does not perform the scan rest.

(32) PH REST TIME

Corresponding to [(31) PH REST PERIOD], set the rest time. When [0] is set in [(31) PH REST PERIOD], this parameter is ignored.
Use this setting to prevent the lost print data from occurring. Set it to [10 sec] as a general rule.

```
#PH REST TIME
>XX:10sec
```

XX : Selected media number

<Parameter (numeral input)>

1 to 99 seconds

(33) PH TEMP REST

Set the temperature gap mode. Set whether the printer goes to standby for every scan if there is a gap between the set temperature of the media print heater and the head temperature. This parameter should be set to prevent the print dot-off. Normally set this parameter [OFF].

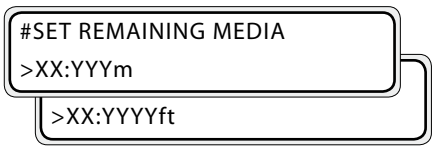
XX : Selected media number

<Parameter (numeral input)>

OFF	The printer does not go to standby even if there is a temperature gap.
ON	If there is a temperature gap, the printer goes to standby for every scan until the temperature gap disappears.

(34) SET REMAINING MEDIA

Set the remaining media. If the remaining media is set beforehand, by subtracting the printed length the printer will know the remaining media in the MEDIA MENU.
When [***] is displayed by invalid entry, the remaining media function is not performed.



XX : Selected media number
YY : Remaining media

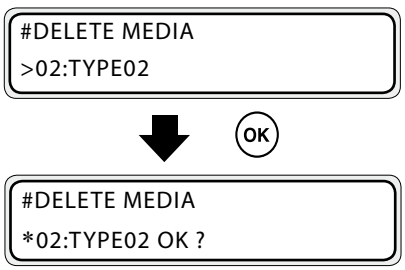
<Parameter (numeral input)>

0 to 999 m	The input unit in the meter unit system is meter (m).
0 to 3278 ft	The input unit in the inch unit system is feet (ft).

HINT - The parameter display unit is displayed in unit set in [LENGTH UNITS] of SETUP MENU.

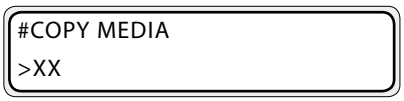
(35) DELETE MEDIA

Delete the saved media.
No. 01 to 20 of saved media can be selected.
The saved media 01 is positioned as a reference and cannot be deleted.
Also, the media presently set in the printer cannot be deleted.
To perform the delete operation, press (OK) key.



(36) COPY MEDIA

Select the media number of copy source.
It is used to copy the media information (parameters) of one saved media to other media.
Designate the copy destination in [(37) PASTE MEDIA].



XX : Copy source media number

Note

- **When the media number designated as the copy source is deleted, the copy source is automatically set to [01].**

<Parameter (selection input)>

01 to 20	The registered numbers only are displayed.

(37) PASTE MEDIA

Select the media number of copy destination.

XX : Copy source media number
YY : Copy destination media number

<Parameter (selection input)>

01 to 20	[*] is appended to the already registered number displayed.

■ COPY MEDIA, PASTE MEDIA

Select the copy source and the copy destination and copy the media prameters.
The parameters to be copied are respective setting content of (2) to (34) in the MEDIA REG MENU.
In the function to copy the information of saved media, the parameters can be copied using [(36) COPY MEDIA] and [(37) PASTE MEDIA] as a set.
For details, refer to how to copy the parameters in the next page.

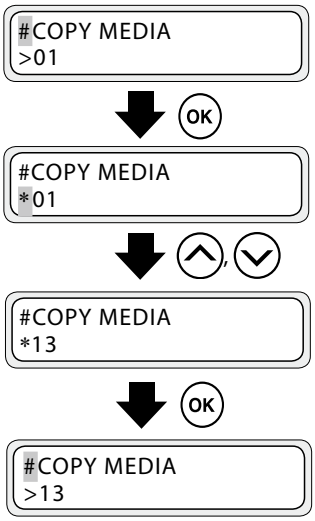
■ How to copy the parameter

Here, the procedure to copy the parameters in the media No. 13 to the media No. 20 is explained.

1 Select the copy the source.

Select the media number with ^, v keys. (Only the saved source numbers are displayed.) Select the media number of copy source with OK key.

When CANCEL key is pressed in each menu, the menu returns to the first one.



2 Select the copy destination.

On the display, the number (13) on the left hand side is the media number of copy source and the number at the right hand side is the media No. of copy destination.

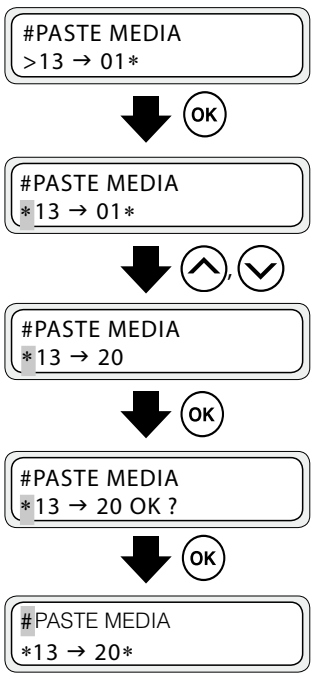
With ^, v keys, select the media number. (The copy destination numbers 01 to 20 are displayed.) When the copy destination is already registered, * is added to the end of number.

With OK key, select the media number of copy destination.

If the copy destination is newly saved, * is not appended to the end of number.

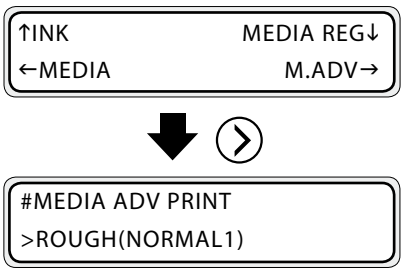
With OK key, execute the parameter copy.

When CANCEL key is pressed in each menu, the menu returns to the first menu.



M.ADV MENU

Set the parameters for media advance prints. To set the parameters, press "(>)"key.



(1) MEDIA ADV PRINT

To determine the MEDIA ADVANCE VALUE, print the media advance print.
There are two types of media advance prints, [ROUGH] and [DETAIL]. With [ROUGH], seek the rough value and then select the proper value with [DETAIL]. Adjust the MEDIA ADVANCE VALUE in each print mode. By pressing CANCEL key during printing, printing can be stopped.

```
#MEDIA ADV PRINT
>ROUGH(NORMAL1)
```

<Parameter (selection input)>

ROUGH(NORMAL1)	Prints the paper feed amount adjustment pattern at every 0.5% step between 99.0 and 101.0 %. (With in NORMAL1 mode)
ROUGH(QUALITY)	Prints the paper feed amount adjustment pattern at every 0.5% step between 99.0 and 101.0 %. (With in QUALITY mode)
ROUGH(DENSITY)	Prints the paper feed amount adjustment pattern at every 0.5% step between 99.0 and 101.0 %. (With in DENSITY mode)
ROUGH(DRAFT)	Prints the paper feed amount adjustment pattern at every 0.5% step between 99.0 and 101.0 %. (With in DRAFT mode)
ROUGH(FINE DRAFT)	Prints the paper feed amount adjustment pattern at every 0.5% step between 99.0 and 101.0 %. (With in FINE DRAFT mode)
DETAIL(NORMAL1)	Prints the paper feed amount adjustment pattern at every 0.1% step between current setting value ± 0.2%.
DETAIL(QUALITY)	Prints the paper feed amount adjustment pattern at every 0.1% step between current setting value ± 0.2%.
DETAIL(DENSITY)	Prints the paper feed amount adjustment pattern at every 0.1% step between current setting value ± 0.2%.
DETAIL(DRAFT)	Prints the paper feed amount adjustment pattern at every 0.1% step between current setting value ± 0.2%.
DETAIL(FINE DRAFT)	Prints the paper feed amount adjustment pattern at every 0.1% step between current setting value ± 0.2%.

Note

- **When printing an image with print modes [NORMAL2], use [NORMAL1] to adjust.**

(2) MEDIA ADV VALUE

Adjust the media advance value. Reading the print result of media advance print, enter the media advance value.

```
#MEDIA ADV VALUE
#XXXXXX>100.00%
```

XXXXXX : Media name

<Parameter (numeral input)>

Within the setting range of 97.00 to 103.00 % MEDIA ADVANCE VALUE

(3) BACK ADJUST PRINT

When adjusting the media back adjustment (when PH cleaning mode [DURING PRNT] is selected), print the back adjust print.
Select the parameters to meet the respective print mode.

```
#BACK ADJ PRINT
>NORMAL1
```

<Parameter (selection input)>

Print mode	Using MEDIA ADV PRINT
NORMAL1, NORMAL2	NORMAL1
QUALITY	QUALITY
DENSITY	DESITY
DRAFT	DRAFT
FINE DRAFT	FINE DRAFT

(4) BACK ADJUST VAL

Set the back adjust value of the media. Reading the print result of back adjust print, enter the back adjust value.

```
#BACK ADJUST VAL
#XXXXXX>+0000P
```

XXXXXX : Media name

<Parameter (numeral input)>

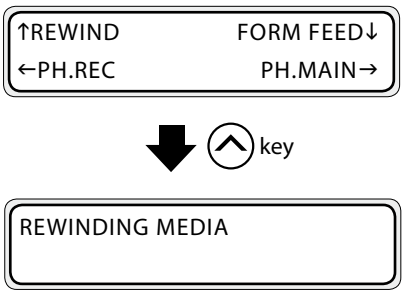
+/−2000 pulses (Unit : about 3.5 µm)

Note

- **The back adjust value of the media is valid when the PH cleaning mode [DURING PRNT] is set. (☞ P.3-34 [(26) PH CLEANING])**

REWIND MENU

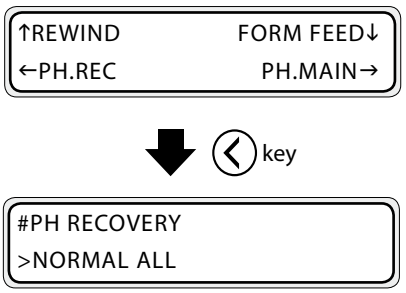
While you keep pressing (^) key, the media is being rewound.



When releasing your hand off (^) key, the media stops and the printer returns to the offline state (menu mode).

PH.REC MENU

This is used to perform the print head cleaning of printer. To enter in the PH.REC MENU of Print head, press "(<)" key



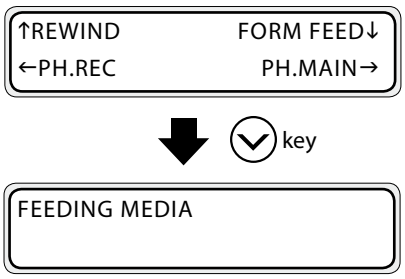
<Parameter (selection input)>

NORMAL ALL	Recovery clogged nozzles.
STRONG ALL	Recovery of clogged nozzle when not solved with [NORMAL ALL].

For detailed cleaning operation, refer to **[Section 4 Print head cleaning] (☞P.4-19).**

FORM FEED MENU

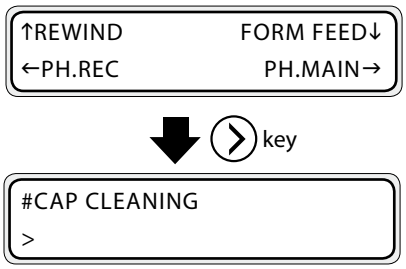
While pressing ⌄ key, the printer keeps feeding the media. (In case of the sheet media, the paper is ejected.)



When releasing the hand off ⌄ key, the media stops and the printer returns to the offline state (menu mode).

PH.MAIN MENU

This is used in the maintenance and replacement of Capping unit/wiper blade and the cleaning the ink flowing path, To operate PH.MAIN MENU, press "(>)" key.



(1) Cap cleaning

The carriage moves to the maintenance area so that the Capping unit can be periodically cleaned. (☞**P.4-6 [Clean the Capping unit]**)

<Parameter (execution method)>

None

(2) Service

Execute the service (cleaning) operation.

<Parameter (selection input)>

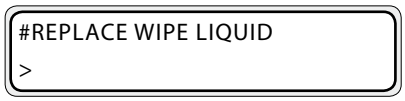
STORE INK SYS	Clean the Print head and ink path with the storage liquid and fill the storage liquid so that the printer can be left for a long period of time.
CLEAN INK SYS	When returning to the printer after being switched off for a long period of time with service clean implemented, clean the Print head and ink flow- path with the cleaning liquid.
CHARGE INK SYS	Used this when filling the ink in the printer after performing the clean.

(3) REPLACE WIPER BLADE

Used to replace the wiper blade.
(☞**P.4-21 [Wiper blade replacement]**)

(4) REPLACE WIPE LIQUID

Used to replace Wiper cleaning liquid in the bottle. (☞**P.4-23 [Wiper cleaning liquid replacement]**)



(5) REPLACE WIPER SPONGE

Used to replace the Wiper sponge. (☞**P.4-25 [Wiper sponge replacement]**)

(6) Fill Cap

This function fills the cap with the ink so that the Print head (nozzle surface) is submerged in ink. Leave the printer 1 to 2 hours and check again.
Use this function if the lost print data is not resolved, even if cleaning is repeated .

<Parameter (execution method)>

None

Note

- **Before printing after executing the fill cap, perform a cleaning (normal).**
- **If the printer is left for 24 hours and the lost print data (clogged nozzles) is not restored, contact your dealer or Seiko I Infotech directly.**

(7) PH HEIGHT ADJ

Used to adjust the Print head height. (☞**P.2-44 [Change the Print head height]**)

```
#PH HEIGHT ADJ
>
```

(8) RESEAT PRINT HEAD

Check the poor contact of connector connection, based on the message.

```
#RESEAT PRINTHEAD
>
```

(9) PH WARM

Head warming-up is used to warm up the Print head. When the temperature inside the printer is low, head warming-up is automatically started immediately before printing. Use the head warming-up to warm up the Print head in advance before printing.

```
#PH WARM
>
```

(1) When head warming-up is executed, the message is displayed as shown on the right side.

```
#PH WARM
*PH WARMING UP          XXm
```

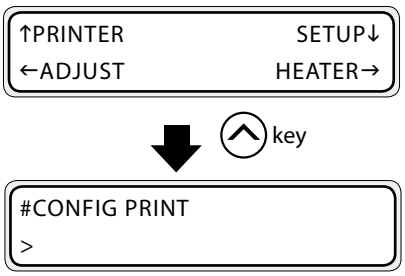
XX : Time required to finish the head warming-up

(2) When the Print head temperature reaches to a certain level, the message is displayed as shown on the right side. Head warming-up finishes after the carriage moves to operate several scanning (and also feeding the media by few cm).

```
#PH WARM
*EXECUTING
```

PRINTER MENU

Use the following when executing the functions provided in the printer.
To execute the function, press "^" key.



(1) Menu print

This function prints the printer information and panel setting information.

<Parameter (execution method)>

None

(2) Error log print

This function prints the error log information saved in the printer.

<Parameter (execution method)>

None

(3) History print

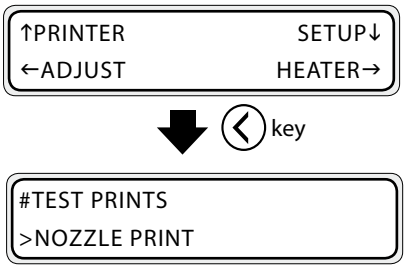
This function prints the ink system cleaning status and the log of Print head replacement.

<Parameter (execution method)>

None

ADJUST MENU

Use this function when setting the mechanical adjustment parameters. To set the mechanical adjustment parameters, press "(<)" key.



(1) Adjustment pattern

To perform the mechanical and electrical adjustments, print the adjustment pattern.
To stop printing, press CANCEL key.

<Parameter (selection input)>

NOZZLE PRINT	Prints the nozzle check pattern (without cleaning). Use it for daily inspection.
PH TO PH	Prints the head position adjustment pattern.
ADJUST PH R/L	Prints the head right and left adjustment pattern.
BIDIRECTION1	When printing in the print mode other than [NORMAL2] and [FINE DRAFT], set the value of bi-directional correction.
BIDIRECTION2	When printing in [NORMAL2], set the value of bi-directional correction.
BIDIRECTION3	When printing in [FINE DRAFT], set the value of bi-directional correction.
NOZZLE POS ADJ	Prints the nozzle position adjustment pattern.
LS ADJ PRINT	Prints the sensor position adjustment pattern.
TUR ADJ PRINT	Prints the adjustment pattern for take-up reel unit.

(2) PH TO PH VAL

This function adjusts head position (print position in the right and left direction of media) of primary printing direction of each Print head. Reading the print result of [PH TO PH], enter the value. (☞**P.4-33 [Head position adjustment]**)

```
#PH TO PH VAL
#YY      >+00
```

YY : Ink color
Display order : Y → M → C → Lm → Lc

<Parameter <numeral input)>

+/–, – 32 to + 31

(3) PH R&L ADJ VAL

Used to adjust the right and left nozzle spotting positions of each print head. (☞**P.4-33 [Head position adjustment]**)

```
#PH R/ L ADJ VAL
#YY      >+00
```

YY : Ink color
Display order : Y→M→C→K→Lm→Lc

<Parameter (numeral input)>

+/–, – 32 to + 31

(4) BIDIR ADJ1 L

This function adjusts the bi-directional position of set media. Reading the print result of [BIDIRECTION1], enter the value.
(☞**P.4-33 [Head position adjustment]**)

```
#BIDIR ADJ1 L  XXXXXX
#YY      >+00
```

YY : Ink color
XXXXXX : Media name
Display order : Y→M→C→K→Lm→Lc

<Parameter (numeral input)>

+/–, – 32 to + 31

(5) BIDIR ADJ1 R

This function adjusts the bi-directional position of set media. Reading the print result of [BIDIRECTION1], enter the value.
(☞**P.4-33 [Head position adjustment]**)

```
#BIDIR ADJ1 R  XXXXXX
#YY      >+00
```

YY : Ink color
XXXXXX : Media name
Display order : Y→M→C→K→Lm→Lc

<Parameter (numeral input)>

+/–, – 32 to + 31

(6) BIDIR ADJ2 L

This function adjusts the bi-directional position of set media. Reading the print result of [BIDIRECTION2], enter the value.
(☞**P.4-33 [Head position adjustment]**)

```
#BIDIR ADJ2 L  XXXXXX
#YY      >+00
```

YY : Ink color
XXXXXX : Media name
Display order : Y→M→C→K→Lm→Lc

<Parameter (numeral input)>

+/–, – 32 to + 31

(7) BIDIR ADJ2 R

This function adjusts the bi-directional position of set media. Reading the print result of [BIDIRECTION2], enter the value.
(☞**P.4-33 [Head position adjustment]**)

```
#BIDIR ADJ2 R  XXXXXX
#YY      >+00
```

YY : Ink color
XXXXXX : Media name
Display order : Y→M→C→K→Lm→Lc

<Parameter (numeral input)>

+/–, – 32 to + 31

(8) BIDIR ADJ3 L

This function adjusts the bi-directional position of set media. Reading the print result of [BIDIRECTION3], enter the value.
(☞**P.4-33 [Head position adjustment]**)

```
#BIDIR ADJ3 L  XXXXXX
#YY      >+00
```

YY : Ink color
XXXXXX : Media name
Display order : Y→M→C→K→Lm→Lc

<Parameter (numeral input)>

+/–, – 32 to + 31

(9) BIDIR ADJ3 R

This function adjusts the bi-directional position of set media. Reading the print result of [BIDIRECTION3], enter the value.
(☞**P.4-33 [Head position adjustment]**)

```
#BIDIR ADJ3 R  XXXXXX
#YY      >+00
```

YY : Ink color
XXXXXX : Media name
Display order : Y→M→C→K→Lm→Lc

<Parameter (numeral input)>

+/–, – 32 to + 31

(10) NOZZLE POS VAL

This function adjusts the nozzle position of each head in the sub-scanning direction. Enter a correction value according to the printed [NOZZLE POS ADJ] pattern.

(☞**P.4-33 [Head position adjustment]**)

```
#NOZZLE POS VAL
#YY      >0
```

YY : Ink color
Display order : Y→M→C→K→Lm→Lc

<Parameter (numeral input)>

0 to 8

(11) LS ADJ TOP VAL

According to the print results of [LS ADJ PRINT], enter the correction value for the sensor (top) position.

(☞**P.4-33 [Head position adjustment]**)

```
#LS ADJ TOP VAL
>+0.0mm
```

<Parameter (numeral input)>

0 to 8

Note

- **Regardless of the unit configured with "LENGTH UNITS", this parameter is shown in the unit of millimeter (mm).**

(12) LS ADJ SIDE VAL

This function adjusts the print position of the media. According to the print results of [LS ADJ PRINT], enter the correction value for the sensor (side) position.

(☞**P.4-33 [Head position adjustment]**)

```
#LS ADJ SIDE VAL
>+0.0mm
```

<Parameter (numeral input)>

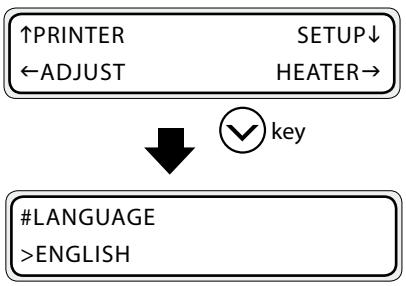
0 to 8

Note

- **Regardless of the unit configured with "LENGTH UNITS", this parameter is shown in the unit of millimeter (mm).**

SETUP MENU

Use this when setting or displaying the system parameter. To set the system parameter, press ⌄ key.



(1) LANGUAGE

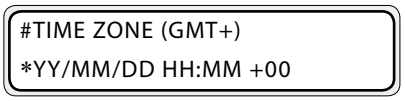
Select the language for LCD message.

<Parameter <selection input>)

JAPANESE	The LCD message is displayed in Japanese.
ENGLISH	The LCD message is displayed in English.
FRENCH	The LCD message is displayed in French.
ITALIAN	The LCD message is displayed in Italian.
GERMAN	The LCD message is displayed in German.
SPANISH	The LCD message is displayed in Spanish.
PORTUGUESE	The LCD message is displayed in Portuguese.

(2) Time Zone

Select the time zone.
When changing the time zone, the local time displayed is updated.



YY : Year MM : Month DD : Day HH : Hour
MM : Minute
YY/MM/DD HH : MM :
The date and time that are calculated by adding the internal time (Greenwich Mean Time=GMT) to the time zone time are displayed.

<Parameter <selection input)>

– 12 to +12	Selection input of a total 25 stages at every one hour

(3) Length Unit

Select the length unit when displaying various parameters.

```
#LENGTH UNITS
>MILLIMETER
```

<Parameter (selection method)>

MILLIMETER	This displays in the meter unit system of mm (millimeter) or m (meter)
INCH	This displays in the inch unit system of " (inch) or ft (feet).

(4) Temperature Unit

Select a temperature unit.

```
#TEMPERATURE UNITS
>CENTIGRADE
```

<Parameter (selection method)>

CENTIGRADE	Centigrade
FAHRENHEIT	Fahrenheit

(5) INK TYPES

Select an ink type.

```
#INK TYPES
>LX
```

<Parameter (selection method)>

LX	To apply EG-Outdoor LX, select this.
EX	To apply EG-Outdoor EX, select this.

Note

- **EG-Outdoor LX and EG-Outdoor EX cannot be mixed or applied concurrently.**

(6) Head warming-up

Set the head warming-up.

```
#HEAD WARMING
>ON
```

<Parameter (selection method)>

ON	When the temperature is low, the head warming-up is executed. (Normally use this mode.)
OFF	When the temperature is low, the head warming-up is not executed.

Note

- **When this mode is turned off, the head warming-up is automatically canceled.**

HINT - See ☞P.5-3 [Although the printer is in the print mode, printing does not start with "PH WARMING UP" displayed on the operation panel.]

(7) BEEP

This function sets whether or not the warning beep sounds in the condition below

- State that the Print head is dislocated from the cap in the daily maintenance or height adjustment
- State that due to media jamming (media stack) error during printing the Print head cannot be capped
- When confirming the Print head
- When the base (origin) is being set

```
#BEEP
>ON
```

<Parameter (selection method)>

ON	The beep sounds.
OFF	The beep does not sound.*

* Irrespective of this setting, when the normal error occurs, the beep sounds.

(8) BOOT Version

This displays the BOOT version.

```
#BOOT VERSION
*X.XX
```

<Parameter (execution method)>

None

(9) F/W version

This displays the version of system F/W.

```
#PRINTER FW VER
*X.XX_YY
```

<Parameter (execution method)>

None

(10) LEE version

This displays the version of LEE board.

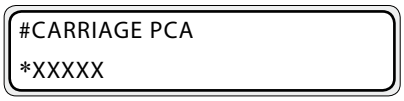
```
#MAIN PCA VER
*XXXXX
```

<Parameter (execution method)>

None

(11) LEC version

This displays the version of LEC board.

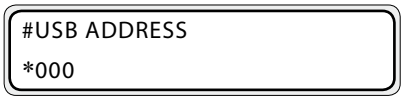


<Parameter (execution method)>

None

(12) USB address

This displays the USB address.



<Parameter (execution method)>

None

(13) USB speed

This displays the transfer speed of USB connection.

<Parameter <execution method)>

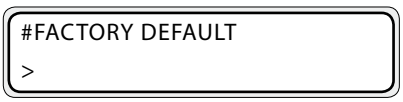
HIGH-SPEED	It is connected in HIGH-SPEED.
FULL-SPEED	It is connected in FULL-SPEED.

Note

- **This only displays the present connection state. In this menu, the transfer speed cannot be selected.**

(14) Initial Setting

This sets all of the parameters to the initial settings at the factory.



<Parameter (execution method)>

None

Note

- **The printer must be rebooted after setting the initial setting.**

(15) Update

Use this when updating the firmware.

```
#PRINTER FW UPGRADE
>
```

<Parameter (execution method)>

None

Note

- **The printer must be rebooted after the firmware is updated.**

(16) Download

Use this function when downloading each parameter from the computer to the printer.

```
#DOWNLOAD
>
```

<Parameter (execution method)>

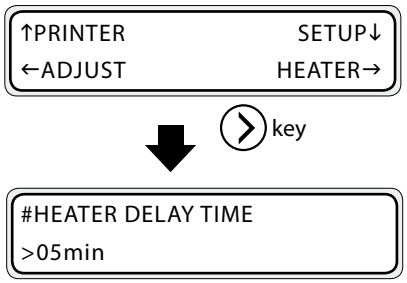
None

Note

- **After downloaded, the printer needs to rebooted.**

HEATER MENU

Use this when setting heater delay time and heater standby time. To set the system parameter, press (>) key.



(1) HEATER DELAY TIME

Select the language for LCD message.
(☞**P.2-41)**

#HEATER DELAY TIME
>05min

<Parameter <selection input>)

00 to 30

(2) HEATER STANDBY TIME

Sets the time that the heater keeps the standby temperature after printing is completed. (Transition time to the standby temperature is included)(☞**P.2-41)**

#HEATER STANDBY TIME
>30 min

<Parameter (selection method)>

NONE	Does not keep the standby temperature.
30 min	Keeps the standby temperature for 30 minutes.
60 min	Keeps the standby temperature for 1 hour.
90 min	Keeps the standby temperature for an hour and half.
120 min	Keeps the standby temperature for 2 hours.
CONTINUOUS	Continues to keep the standby temperature.

4 Maintenance and Adjustment / Replacement

This section describes the maintenance and adjustment of the printer and the replacement of consumables.
(For replacement of ink cartridge, Waste ink bottle and media, refer to **[Section 2 Basic Operation]**.

(Content of this section)

Periodic maintenance.....4-2
Print head cleaning 4-19
Wiper blade replacement.....4-21
Wiper cleaning liquid replacement 4-23
Wiper sponge replacement.....4-25
Media cutter blade replacement.....4-27
Media advance value setting.....4-28
Head position adjustment.....4-33
Adjustment of take-up reel unit 4-47

Periodic maintenance

This section explains the periodic inspection/periodic maintenance procedures.

Periodic inspection/Maintenance guide

This printer needs to be periodically inspected and maintained.
For each periodic inspection/maintenance, refer to pages described below and perform properly.

Regular Inspection / Maintenance (Daily maintenance)

everyday

(1) Check the remaining wiper cleaning liquid ☞ P.4-3
(2) Check the stain on the Wiper blade ☞ P.4-4
(3) Check the Waste ink bottle ☞ P.4-3
(4) Implementation of the nozzle print ☞ P.4-8

every-week

(5) Clean the Capping unit ☞ P.4-6
(6) Clean the Print head [normal] ☞ P.4-19

When returning the printer after being switched off for an extended period (Less than 2 weeks)

(1) Head wash ☞ P.4-12
(2) Ink filling ☞ P.4-12

When leaving the printer for more than 2 weeks after switched off

(1) Service clean ☞ P.4-10

When returning to the printer after being switched off for more than 2 weeks

(1) Head wash ☞ P.4-11
(2) Ink filling ☞ P.4-11

When the printer is left for more than 1 month after switched off

The service call error is displayed. Contact your dealer or Seiko I Infotech.

Regular Inspection / Maintenance (Daily maintenance)

To keep the print quality stable, perform the following six items in order of 1 to 6 described below.

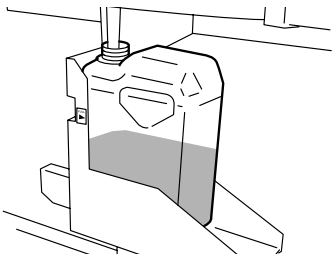
(1) Check the Waste ink bottle	: everyday
(2) Check the wiper cleaning liquid	: everyday
(3) Check the stain on the Wiper blade	: everyday
(4) Clean the Capping unit	: every week
(5) Implementation of the head cleaning [normal]	: every week
(6) Implementation of the nozzle print	: everyday

Note

- **Only use the Cleaning liquid, Cap cleaning stick, Cap cleaning roller or Cleaning swab supplied by Seiko I Infotech.**

(1) Check the Waste ink bottle

Check that the Waste ink bottle is not filled. When the waste ink is filled to the level of [FULL] label, replace the Waste ink bottle with a new one.
(☞**P.2-48 [Waste ink bottle replacement]**)

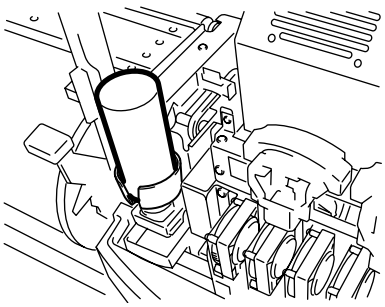


(2) Check the remaining of wiper cleaning liquid

Open the Front cover and the Cap cover and visually check the remaining wipre cleaning liquid.

If the wiper cleaning liquid is empty, replace it. (☞**P.4-23 [Wiper cleaning liquid replacement]**)

The wiper cleaning liquid needs replacement about once a month as a general rule.



(3) Check for stains on the Wiper blade

Visually check for stains and damage on the Wiper blade.

If damage is found, replace the Wiper blade. (☞**P.4-21 [Wiper blade replacement]**)

1 Set the printer to the offline. Press (MENU) key to display PH.MAIN MENU.

```
↑REWIND          FORM FEED↓
←PH.REC          PH.MAIN→
```

2 Press (>) key to enter into PH.MAIN MENU. Then, the cap cleaning menu is displayed.

```
#CAP CLEANING
>
```

3 Select [Wiper blade replacement] with (v) key and press (OK) key.

```
#REPLACE WIPER BLADE
>
```

4 When the confirmation menu appears, press (OK) key.

The position of Wiper blade moves.

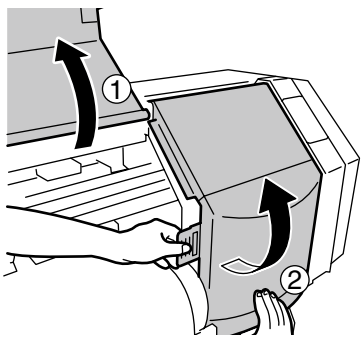
```
#REPLACE WIPER BLADE
*OK ?
```

(OK)

```
WIPER MOVING
PLEASE WAIT
```

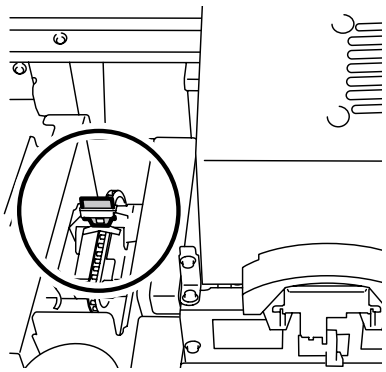
5 Open the Front cover and the Cap cover.

```
OPEN COVER
REPLACE WIPER BLADE
```



6 Visually check for stains and damage on the Wiper blade.

If a damage is found, replace the Wiper blade. (☞**P.4-21 [Wiper blade replacement]**)



Note

- **If the Wiper blade is contaminated, check visually that the Wiper sponge is properly installed. If not set properly, set it correctly. (P.4-25 [Wiper sponge replacement])**
- **Check the level in the Wiper cleaning liquid bottle. If it is empty, replace the wiper cleaning liquid in the bottle. (P.4-23 [Wiper cleaning liquid replacement])**

7 Close the Cap cover and the Front cover.

```
#REPLACE FINISHED
*NO
```

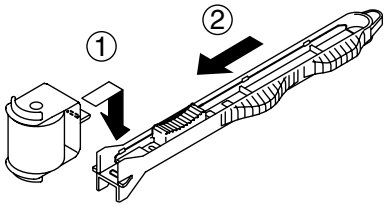
8 Select [*NO] and press (OK) key to finish.

Note

- **The printer automatically accumulates the time when the wipe blade is used and displays the message prompting to replace the Wiper blade. If a new Wiper blade is installed and [*YES] is set, the value of accumulator is reset.**

(4) Clean the Capping unit

1 Install the Cap cleaning stick to the Cap cleaning roller.



2 Set the printer to the offline and press (MENU) key to display PH.MAIN MENU.

```
↑REWIND          FORM FEED↓
←PH.REC          PH.MAIN→
```

3 Press (>) key to enter in PH.MAIN MENU3. Then, the cap cleaning menu is displayed.

```
#CAP CLEANING
>
```

4 Press (OK) key. When the confirmation menu appears, press (OK) key again.
The carriage moves.

```
#CAP CLEANING
>
```

(OK)

```
#CAP CLEANING
*OK ?
```

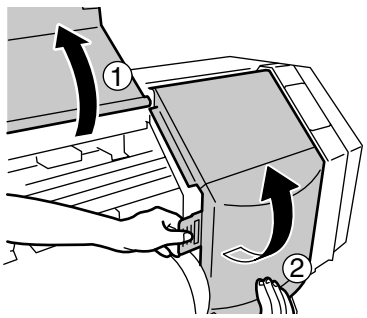
(OK)

```
CARRIAGE MOVING
PLEASE WAIT
```

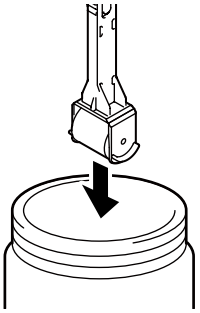
HINT When the carriage moves, the warning beep sounds.
(☞**P.3-56 [(7) BEEP]**)

5 Open the Front cover and then the Cap cover.

```
OPEN COVER
CAP CLEANING
```



6 Dip the Cap cleaning roller in the Cap cleaning liquid.

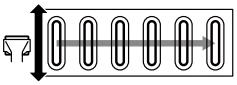


Note

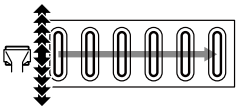
- **Do not dip the Cap cleaning roller used in cleaning once in the cap cleaning liquid bottle. The Cap cleaning liquid will be contaminated.**

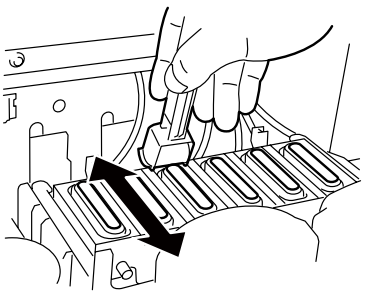
7 Clean on the surface of cap, rolling the Cap cleaning Roller.

1. First, roll the Cap cleaning roller on 6 caps at the rightmost side, shuttling once each.



2. Next, roll the Cap cleaning roller on 6 caps at the rightmost side, shuttling 10 times each.





Note

- **The Cap cleaning roller is intended for a single use only. Use a new Cap cleaning roller for each cleaning.**

8 Close the Cap cover and the Front cover.

The carriage automatically returns to the original position.

Note

- **Do not expose the Print heads for an unnecessarily long time when taking it out of the Capping unit. Finish working quickly and cap the Print heads.**
- **After cleaned, if the lost print still occurs, remove foreign matters and ink stains on the cap with the Cleaning swab soaked with cap cleaning liquid while checking visually.**
- **Be careful for cap cleaning liquid not to stick parts other than the cap.**

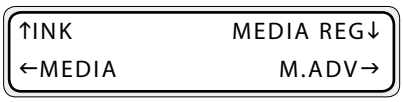
(5) Implementation of the Print head cleaning [NORMAL ALL]

Select PH.REC MENU from the operation panel and then [NORMAL ALL] to perform the cleaning. (☞**P.4-19 [Print head cleaning]**)

(6) Performing the nozzle print

The nozzle print is performed to confirm that the nozzles of Print head are not blocked. Before printing each day or after cleaning the caps, run the nozzle print to verify the Print head performance.

1 Set the printer to the offline. (Press ONLINE key.)



2 Press MENU key twice to display ADJUST MENU.

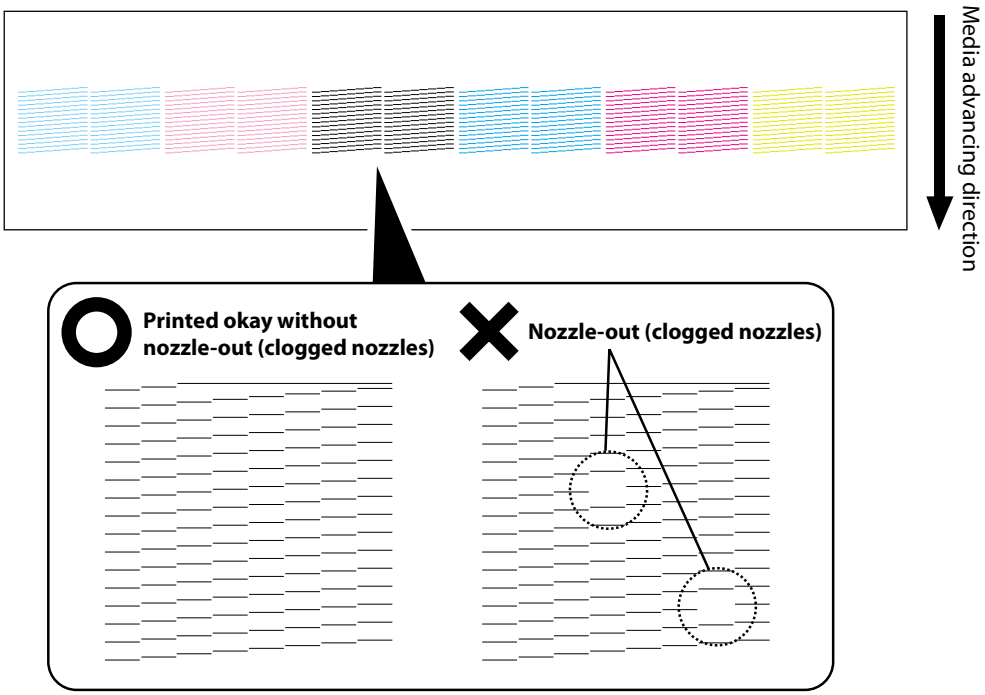
3 Press ◁ key to display the adjustment pattern.

4 Press OK key.

5 Press OK key.

6 When pressing OK key, after performing the warm-up, the adjustment pattern shown in the next page is printed.

• Sample of print [Nozzle print]



Confirm that all nozzles are firing correctly.

If the missing nozzles are found on the nozzle print, Perform "(5) Print head cleaning [NORMAL ALL]" again.

Note

- **Do not expose the Print heads for an unnecessarily long time when taking it out of the Capping unit. Finish working quickly and cap the Print heads.**

■ When leaving the printer for more than 2 weeks powered off

To prevent the Print head from drying, need to be filled with storage liquid. A storage kit is required. Prepare the storage liquid cartridge set (IP5-107).

(1) Service clean

Select PH.MAIN MENU from the operation panel and then the service clean.

After finishing the service clean, turn off the power of printer while the cartridges of storage liquid are inserted in the ink cartridge slots. Then, leave the printer.

When returning to the printer after performing the service clean and being switched off for a long period of time, the head wash is necessary. (☞**P.4-11 [(1) Head wash]**)

■ When leaving the printer for more than 2 weeks powered off

Clean the Print head and the ink path using the Cleaning liquid.
Prepare the Cleaning liquid cartridge set (IP5-138).

(1) Head wash

Select PH.MAIN MENU from the operation panel and then the head wash. Follow the instructions on the LCD screen.

After the head wash, perform the ink filling so that 6 color inks are filled.

```
#INK SYSTEM OPT
>CLEAN INK SYS
```

Note

- **To protect the print head and the ink tubing, do not leave the ink container of the printer empty without re-filling it with ink or storage liquid.**
- **Refrain from opening or closing the Front cover or lever while executing the service clean and head wash. If done so, the operation need to be started from the beginning . Ink and the cleaning liquid will be wasted.**

(2) Filling the ink after the head wash

After performing the head wash, 6 color inks need to be filled in the printer.

Select PH.MAIN MENU from the operation panel and then the ink filling.

To fill inks, insert the ink cartridges of 6 colors.

```
#INK SYSTEM OPT
>CHARGE INK SYS
```

After filling the inks, leave the printer for at least 1 hour. Confirm that the wipe sponge is wet. If necessary, make wet it further. Then, perform the nozzle print. If missing nozzles are found on the nozzle print, perform [NORMAL ALL] from PH.REC MENU.

■ When returning to the printer after being switched off for less than 2 weeks

(1) Head wash

Clean the Print head and the ink path using the Cleaning liquid.

Prepare the Cleaning liquid cartridge set (IP5-138).

After the head wash, fill 6 color inks.

Note

- **To protect the print head and the ink flow path, do not leave the ink container of the printer empty without re-filling it with ink or storage liquid.**
- **Refrain from opening or closing the Front cover or lever while executing the service clean and head wash. If done so, the operation must be started from the beginning . Ink and the cleaning liquid will be wasted.**
- **When leaving the printer for a long time after switched off, the maintenance differs. In case of more than 2 weeks, the printer is left after filled with the storage liquid. In case of less than 2 weeks, leave the printer with inks filled.**

(2) Fill the inks after the head wash

After implementing the head wash, the printer needs to be filled with 6 color inks.

Select PH.MAIN MENU from the operation panel and select the ink filling.

Note

- **In the ink filling, an ink of about 100 ml is used. If a cartridge containing less than 100 ml remaining of ink is inserted, the message prompting to replace the ink cartridge is displayed. Set the cartridge containing more than 20% remaining of ink.**

To fill the ink, insert the cartridges of 6 color inks.

After filling the inks, leave the printer as is for at 1 hour at least.

Then, implement the nozzle print.

When the lost print occurs on the nozzle print, perform the cleaning [NORMAL ALL] from PH.REC MENU.

■ When returning to the printer after being switch off for more than 1 month

Even if the service clean is perform, a service call error is displayed.
Contact your dealer or Seiko I Infotech.

Note

- **To protect the Print head, never leave the printer without storage ink for a long period of time after powered off.**
- **When leaving the printer for more than 1 month, consult with your dealer our Seiko I Infotech.**

Cleaning

■ Clean the exterior

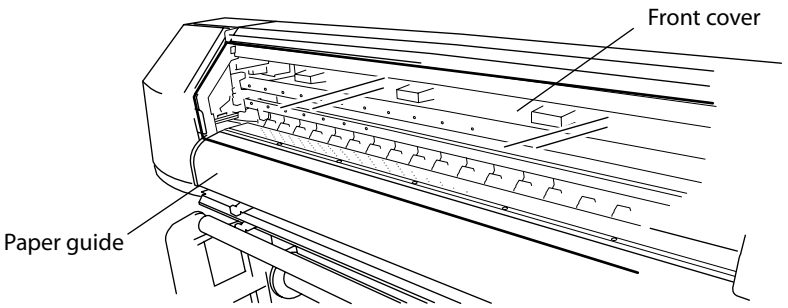
If the printer exterior is stained, moisten the a soft cloth with water or water-diluted neutral detergent, wring it and wipe out stains with wrung cloth.

Note

- **When cleaning, ensure to turn off the power of printer.**
- **Never use volatile solvent such as thinner and benzene. Paint may come off or be discolored.**

■ Clean the Front cover, paper guide, Pressure roller and edge guard

If the printer is contaminated with paper dust and debris, remove them using the air cleaner. If the printer is stained with ink, wipe out the ink stains with a soft cloth moistened with neutral detergent.



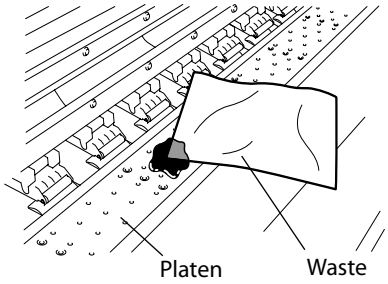
Note

- **When cleaning, ensure to turn off the power of printer.**
- **Do not blow out the paper dust. The exposure of paper dust or debris inside the printer may cause problems or affect the print quality.**
- **When using a media where end of the roll end is glued to the paper tube, the glue may stick to the paper guide or the platen. If this happens, clean and remove it.**
- **When powering on the printer or printing long prints, the ink may accumulate to the edge guard and platen. Clean these items.**

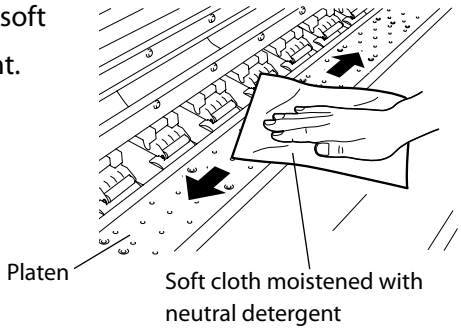
■ Cleaning the platen

If the ink drips on the platen, clean the platen in the following procedure.

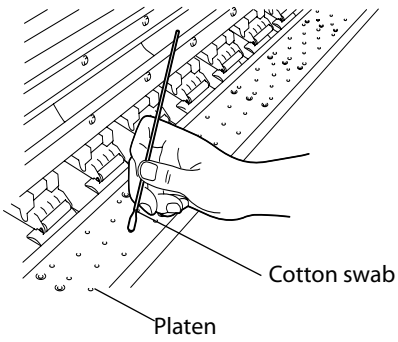
1 Open the Front cover and soak up the ink on the platen with a piece of waste media.



2 Wipe the ink stains off the platen with a soft cloth moistened with a neutral detergent.



3 If the ink penetrates into the vacuum hole on the platen, wipe out the ink stuck to the hole with a commercially available cotton swab*. Then, moisten the cotton swab with neutral detergent and wipe out once more with moistened cotton swab.



■ Cleaning the Carriage base

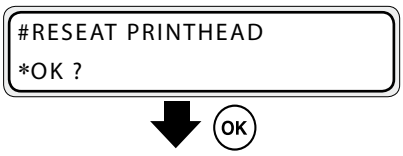
When debris on the Carriage base contacts the media, and black lines appears on the print, clean using the following procedure.

1 Set the printer to the offline. Press (MENU) to display PH.MAIN MENU.

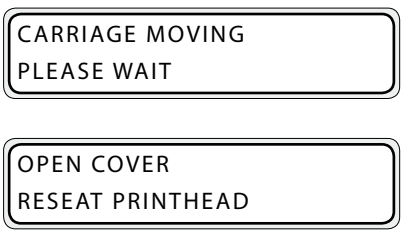
2 Press (>) key to enter in PH.MAIN MENU. Then, the cap cleaning menu is displayed.

3 Select [RESEAT PRINTHEAD] with (v) key and then (OK) key.

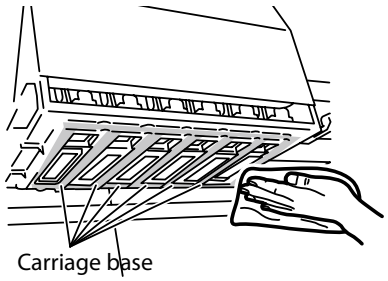
4 When the confirmation menu appears, press (OK) key.
The carriage moves.



5 Open the Front cover and then the Maintenance cover.



6 Wipe the Carriage base with a soft cloth.
After finishing the cleaning, close the Maintenance cover and the Front cover.
The Print head returns to the original position.



Note

- **Do not expose the Print heads for an unnecessarily long time when taking it out of the Capping unit. Finish working quickly and cap the Print heads.**

■ Clean the Head guard

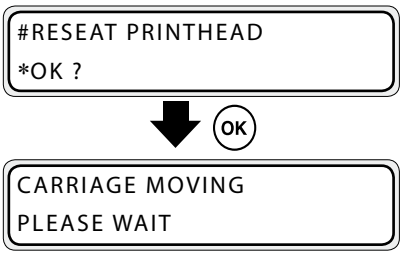
When debris on the Head guards contacts the media and black lines appears on the print, clean in the following procedure.

1 Set the printer to the offline. Press (MENU) to display PH.MAIN MENU.

2 Press (>) key to enter in PH.MAIN MENU. Then, the cap cleaning menu is displayed.

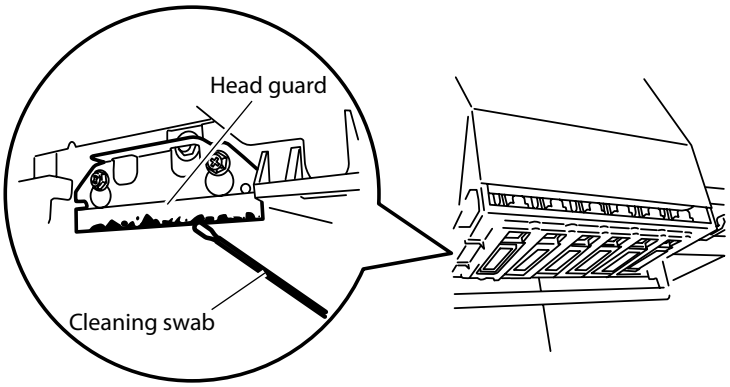
3 Select [RESEAT PRINTHEAD] with (v) key and then press (OK) key.

4 When the confirmation menu appears, press (OK) key.
The carriage moves.



5 Open the Front cover and then the Maintenance cover.

6 Dip the Cleaning swab in the cap cleaning liquid and remove debris on the right and left Head guard of carriage. Visually check the results and repeat if necessary.



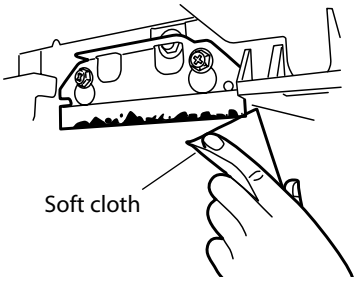
Note

- **Do not dip a used Cap cleaning roller in the cap cleaning liquid bottle. The cap cleaning liquid will be contaminated.**

7 Wipe out stains with a soft cloth.

After finishing the cleaning, close the Maintenance cover and the Front cover.

The Print head automatically returns to the original position.



Note

- **Do not expose the Print heads for an unnecessarily long time when taking it out of the Capping unit. Finish working quickly and cap the Print heads.**

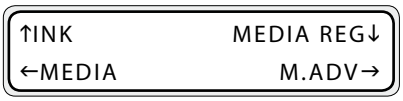
Print head cleaning

Types of Print head cleaning are provided as shown below. Use the suitable one.

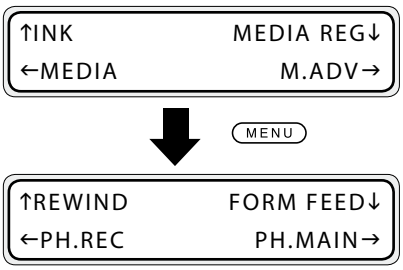
Type of cleaning	Usage
NORMAL ALL	Recovery clogged nozzles
STRONG ALL	Recovery of clogged nozzle when not solved with [NORMAL ALL]

Operating procedure of Print head cleaning

1 Set the printer to the offline.
(Press ONLINE key.)



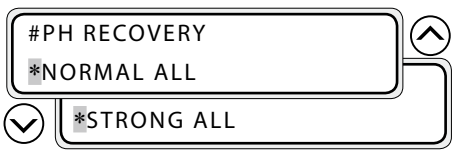
2 Press MENU key to display PH.REC MENU.



3 Press ⟨ key to enter in the head cleaning menu.

4 To set the parameter, press OK key.

5 Select the option for cleaning with ^, v keys.



6 Press (OK) key.

```
#PH RECOVERY
*BOTTLE OK ?
```

7 Check visually that the Waste ink bottle is not fully filled and press (OK) key once again.

```
#PH RECOVERY
*CLEANING          XXX
```

XXX : The numeral is counted down every 10 seconds.

Note

- **Cleaning takes several minutes.**
- **When the cleaning starts, a timer is displayed. The time is decremented every 10 seconds.**

8 When the Print head cleaning finishes, the menu returns to the state in step ***3***.

```
#PH RECOVERY
>NORMAL ALL
```

9 Press (<) key to return to the offline state (menu mode) display.

```
↑REWIND          FORM FEED↓
←PH.REC          PH.MAIN→
```

Wiper blade replacement

This section describes [Wiper blade replacement procedure]. Replace the Wiper blade when the printer displays the replacement message or when a damage is found on the Wiper blade during the daily inspection. Before replacement, locate the tweezers (packed in the starter pack).

1 Set the printer to the offline and press (MENU) key to display PH.MAIN MENU.

```
↑REWIND          FORM FEED↓
←PH.REC          PH.MAIN→
```

2 Press (>) key to enter in PH.MAIN MENU. Then, the cap cleaning menu is displayed.

```
#CAP CLEANING
>
```

3 Select [REPLACE WIPER BLADE] with (v) key and press (OK) key.

```
#REPLACE WIPER BLADE
>
```

4 When the confirmation menu appears, press (OK) key.
The position of Wiper blade moves.

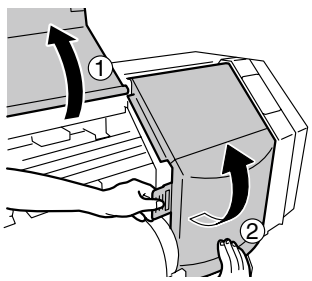
```
#REPLACE WIPER BLADE
*OK ?
```

(OK)

```
WIPER MOVING
PLEASE WAIT
```

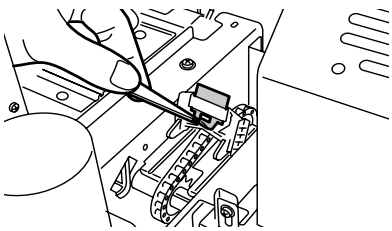
5 Open the Front cover and the Cap cover.

```
OPEN COVER
REPLACE WIPER BLADE
```

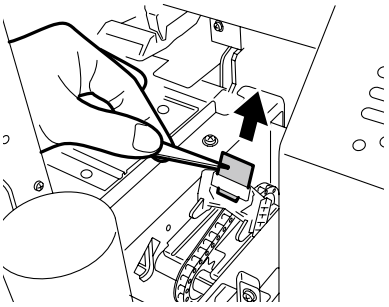



```
REPLACE WIPER BLADE
CLOSE COVER
```

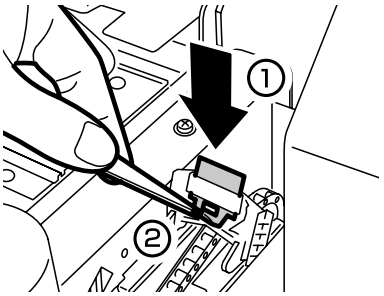
6 Pinch the lower edge of Wiper blade with tweezers and unlock hooking of the plastic.



7 Pull out the Wiper blade while lifting upward.

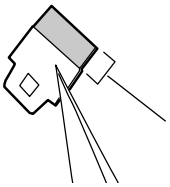


8 Pinch the rubber portion of a new Wiper blade with tweezers and insert straightly the Wiper blade from the top. Finally, install it so that the plastic projection is hooked to the hole of rubber portion.



Note

- **The front and back of the wiper are the same.**
- **As the upper portion of Wiper blade touches directly the Print head, do not touch it by hand or pinch it with tweezers when handling.**



Upper portion of Wiper blade

9 Close the Cap cover and the Front cover.

```
#REPLACE FINISHED
*NO
```

10 Select [*YES] and press (OK) key to finish.

```
#REPLACE FINISHED
*YES
```

Note

- **The printer automatically tracks the time the Wiper blade is used and displays the message prompting to replace the Wiper blade. If a new Wiper blade is installed and [*YES] is set, the value of accumulator is reset.**

Wiper cleaning liquid replacement

This section describes [Wiper cleaning liquid replacement procedure].
Replace the wiper cleaning liquid when the printer displays the replacement message or when the remaining of wiper cleaning liquid bottle is empty in the daily inspection.
The wiper cleaning liquid needs replacement about once a month as a general rule.

1 Set the printer to the offline and press (MENU) key to display PH.MAIN MENU.

```
↑REWIND          FORM FEED↓
←PH.REC          PH.MAIN→
```

2 Press (>) key to enter in PH.MAIN MENU. Then, the cap cleaning menu is displayed.

```
#CAP CLEANING
>
```

3 Select [REPLACE WIPE LIQUID] with (v) key and press (OK) key.

```
#REPLACE WIPE LIQUID
>
```

4 When the confirmation menu appears, press (OK) key.

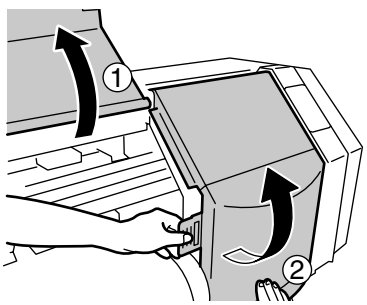
```
#REPLACE WIPE LIQUID
*OK ?
```

(OK)

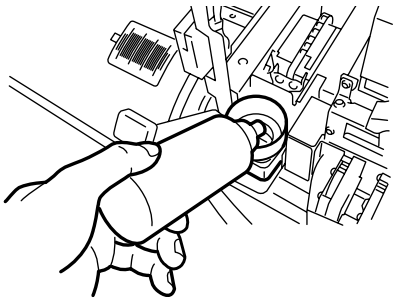
```
OPEN COVER
REPLACE WIPE LIQUID
```

5 Open the Front cover and the Cap cover.

```
REPLACE WIPE LIQUID
CLOSE COVER
```



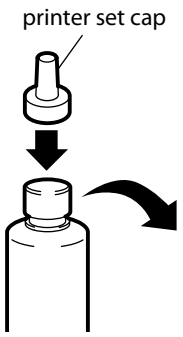
6 Raise up the old Wiper cleaning liquid bottle a little and pull out the bottle after ensuring that all liquid flows in the printer.



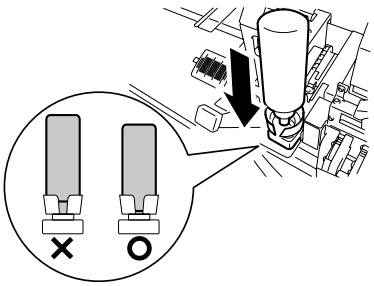
Note

- **Visually check that the Waste ink bottle is empty before removing.**

7 Replace the cap of new Wiper cleaning liquid bottle with the printer set unused cap.



8 Set the Wiper cleaning liquid bottle in the printer and push in the stopper of printer set cap by pressing the top.



9 Close the Cap cover and the front over.

```
#REPLACE FINISHED
*NO
```

10 Select [* YES] and press the (OK) key to finish the replacement.

```
#REPLACE FINISHED
*YES
```

Note

- **The printer automatically tracks the time the Wiper cleaning liquid is used and displays the message prompting to replace the wiper cleaning liquid bottle. If a new bottle is installed and [*YES] is set, the value of accumulator is reset.)**
- **The wiper cleaning liquid may appear to be tinted. This is normal.**

Wiper sponge replacement

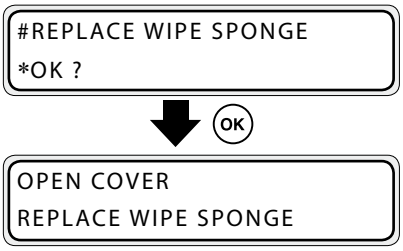
This section describes [Wiper sponge replacement procedure].
Replace the Wiper sponge when the printer displays the replacement message.
The wiper sponge needs replacement about once every six months as a general rule.

1 Set the printer to the offline and press (MENU) key to display PH.MAIN MENU.

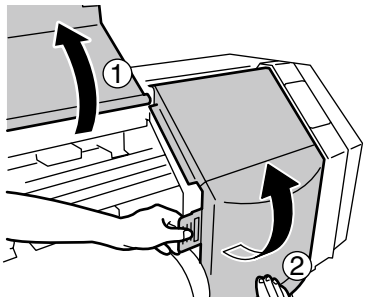
2 Press (>) key to enter in PH.MAIN MENU2. Then, the cap cleaning menu is displayed.

3 Select [REPLACE WIPE SPONGE] with (v) key and press (OK) key.

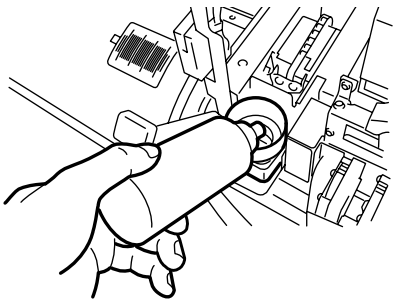
4 When the confirmation menu appears, press (OK) key.



5 Open the Front cover and the Cap cover.



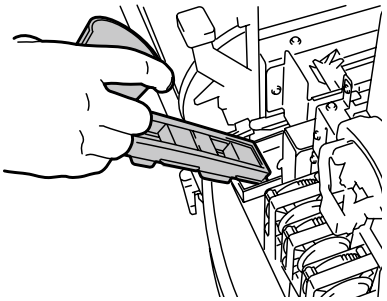
6 Raise up a Wiper cleaning liquid bottle a little and pull out the bottle after confirming that all liquid flows in the printer.



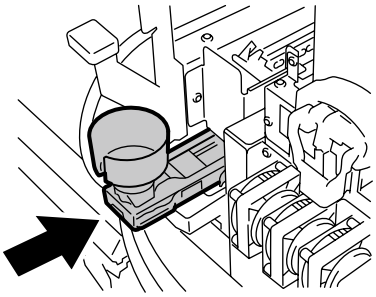
Note

- **Visually check that the Waste ink bottle is empty before removing**

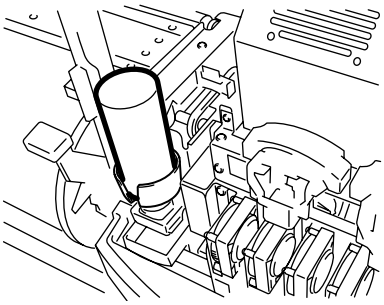
7 Erect the Wiper sponge little by little while drawing the Wiper sponge toward you. After confirming that the liquid in the Wiper sponge flows in the printer completely, pull out the Wiper sponge.



8 Install a new Wiper sponge.
Insert it as far as it goes until it clicks.



9 Install a new Wiper cleaning liquid bottle.
(☞**P.4-23 [Wiper cleaning liquid replacement]**)



10 Close the Cap cover and the front over.

```
#REPLACE FINISHED
*NO
```

11 Select [*YES] and press (OK) key to finish the replacement.

```
#REPLACE FINISHED
*YES
```

Note

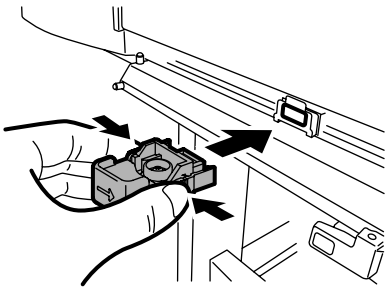
- **The printer automatically tracks the time when the Wiper sponge is used and displays the message prompting replacement of the Wiper sponge. On the premise that a new Wiper sponge is installed and [*YES] is set, the value of accumulator is reset.).**

Media cutter blade replacement

This section describes [Media cutter blade replacement procedure].

1 Hold the side of Media cutter blade and pull it out while removing the hook for fixing.

2 Insert a new Media cutter blade in the printer.



Note

- **Handle it with care. The blade may break if dropped.**

Media advance value setting

The media advance setting varies depending on the thickness, elasticity and frictional surface resistance. If the media advance value is wrong, banding (horizontal stripes) may appear on the print. Use the following procedure to set the appropriate media advance value.

Step 1
Print of adjustment pattern
Print [ROUGH] → [DETAIL].

Step 2
Reading the print result of adjustment pattern,
enter the media advance value.

HINT

The following factors that change the media advance value:
- Type of media
- Print mode
- Pressure change using the Pressure roller up/down lever
- Mode of take-up reel unit
- Media advance mode (FWD ONLY/BACK & FWD)

Media advance value setting procedure

1 Set the media of wider than A1 size in width and longer than 1m in length.

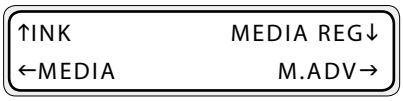
Set the rough media advance value by reading the print of advance adjustment pattern in [ROUGH] and the media advance value in [DETAIL]. Both of [ROUGH] and [DETAIL] prints need the paper of 40 cm to 50 cm in length per one print. (The required paper differs in for different print modes.)

When the take-up reel unit is set to the tension winding, the print length becomes longer.

(To stop the printing of advance adjustment pattern, press CANCEL key.)

2 Set the printer to the offline.

(Press ONLINE key.)



3 Press (>) key and then (OK) key to display the advance adjustment pattern.

Select the normally used print mode in the media to set the media advance value.
(☞**P.3-25 [PRINT MODE]**)

4 Select [ROUGH] for print mode with (▽), (△) keys and press (OK) key.

```
#MEDIA ADV PRINT
*OK ?
```

5 Press (OK) key. Then, the advance adjustment pattern [ROUGH] is printed.

The advance adjustment pattern [ROUGH] is printed in the selected print mode.

```
#MEDIA ADV PRINT
*EXECUTING
```

6 Select the rough media advance value, reading the print result.

5 patterns of each 0.5 % increment in the range of 99.00 % to 101.00 % are printed.

Among 5 patterns, select the best rough media advance value.

7 Press (▽) key and then (OK) key to display MEDIA ADV VAL MENU.

```
#MEDIA ADV VALUE
#XXXXXX>100.00%
```

XXXXXX : Media name

8 Enter the media advance value sought in [ROUGH] and press (OK) key.

Align the digit with (◁), (▷) key and set the numeral value with (▽), (△) keys.

```
#MEDIA ADV VALUE
#XXXXXX>100.00%
```

XXXXXX : Media name

9 Press (^) key and then (OK) key to display the advance adjustment pattern.

```
#MEDIA ADV PRINT
*ROUGH(NORMAL1)
```

10 Select [DETAIL] print mode with (v), (^) keys.

Select the same print mode as in [ROUGH].

```
#MEDIA ADV PRINT
*DETAIL(NORMAL1)
```

11 Press (OK) key twice to print the advance adjustment pattern [DETAIL].

```
#MEDIA ADV PRINT
*EXECUTING
```

12 Select the detail media advance value, reading the print result.

Patterns of each 0.10 % increment in the range of –0.20 % to +0.20 % with respect the media advance value entered in [ROUGH] are printed.

Among 5 patterns, select the appropriate media advance value.

13 Press (v) key and then (OK) key to display MEDIA ADV VAL MENU.

```
#MEDIA ADV VALUE
#XXXXXX>100.00%
```

XXXXXX : media name

14 Enter the media advance value decided in [DETAIL] and press (OK) key.

Align the digit with (<), (>) keys and set the numeral value with (v), (^) keys.

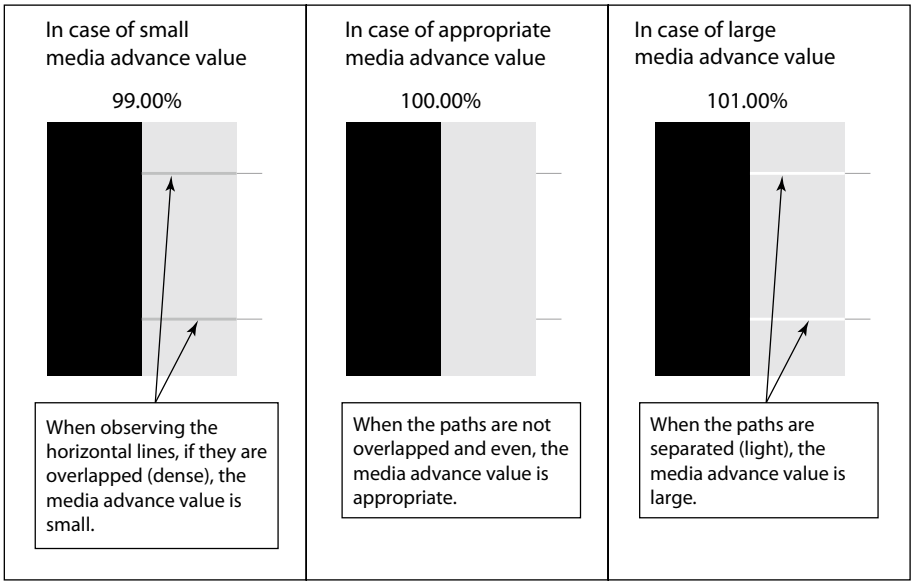
```
#MEDIA ADV VALUE
#XXXXXX *100.00%
```

XXXXXX : media name

15 Press (<) key to return the offline state (menu mode).

HINT How to read the advance adjustment pattern

The case of K color is explained as an example.

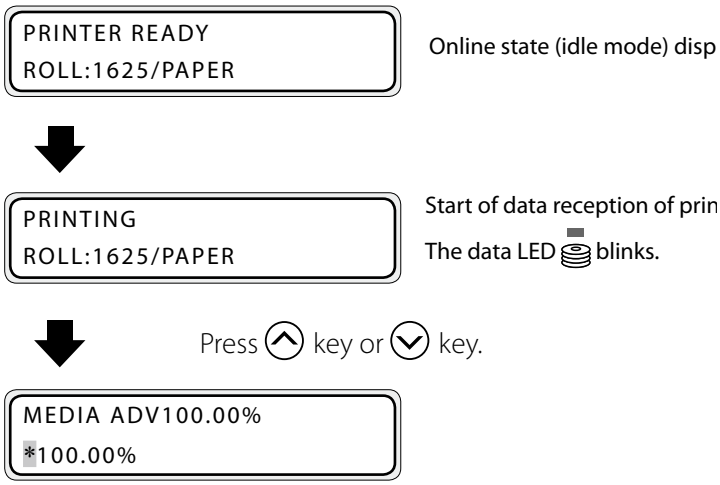

In case of small media advance value
99.00%
When observing the horizontal lines, if they are overlapped (dense), the media advance value is small.
In case of appropriate media advance value
100.00%
When the paths are not overlapped and even, the media advance value is appropriate.
In case of large media advance value
101.00%
When the paths are separated (light), the media advance value is large.

Note

- **When media advance value differs in each Print head (each color), enter the averaged value. However, any color has the priority on a printed image, enter the media advance value specific to that color.**
- **If the media advance value differs at the right and left of media, enter the averaged value.**
- **If the media advance value at the right side of media is different from that at the left side, it may be caused by the slant media. Check that the media is tracking straight.**
- **Enter the media advance value so that the horizontal stripes are not visible. However, it is not necessary to eliminate the horizontal stripes completely.**

Change during online printing

During online printing, the media advance value can be changed in the following procedure.



HINT

- When pressing key or key during printing, the presently operating med advance value is displayed. (Second row on the display)
- The value at the start of printing is displayed on the first row on the display and r unchanged until printing is finished.
- The value is incremented or decremented by 0.01 % with , keys.
- When the value is changed, it is reflected on printing immediately.
- If any key is not operated for 3 seconds, the display returns to the original displa
- Since the changed media advance value is saved as a new value, it is reflected or next print.

Head position adjustment

Print the pattern for adjusting the print position of each Print head and enter the correction value to adjust.

● When replacing the media with a new media

(1) Adjustment of bi-direction position (P.4-34 Adjustment procedure of [BIDIRECTION1/2/3])

Print the adjustment pattern **[BIDIRECTION 1/2/3]** . → Reading the result of adjustment pattern print, enter the value in **[BIDIR ADJ L]** or **[BIDIR ADJ R]**.

(2) Adjustment of bi-direction position (P.4-28 [Media advance value setting])

Print the adjustment pattern **[MEDIA ADV PRINT ROUGH/DETAIL]**. → Reading the result of adjustment pattern print, enter the value in **[MEDIA ADV VALUE]**.

● To get the good printed image quality (Normally, the adjustment is not necessary.)

(1) Adjustment of print position in vertical directions of media

Print the adjustment pattern **[NOZZLE POS ADJ]**. → Reading the result of adjustment pattern print, enter the value in **[NOZZLE POS VAL]**.

(2) Adjustment of print position in the right and left directions of media

Print the adjustment pattern **[PH TO PH]**. → Reading the result of adjustment pattern print, enter the value in **[PH TO PH VAL]**.

(3) Adjustment of print position in the right and left directions of media

Print the adjustment pattern **[ADJUST PH R/L]**. → Reading the result of adjustment pattern print, enter the value in **[PH R/L ADJ VAL]**.

(4) Adjust the position of the picture being printed on the media
(Only when the head (K) is replaced)

Print the adjustment pattern **[LS ADJ PRINT]**. → Reading the result of adjustment pattern print, enter the value in **[LS ADJ TOP VAL]** and **[LS ADJ SIDE VAL]** .

Adjustment procedure of [BIDIRECTION1/2/3]

Adjust the bi-direction position of each head. Reading the result of [BIDIRECTION1], [BIDIRECTION2] and [BIDIRECTION3] print, enter the value.

STEP 1 *How to print the adjustment pattern [BIDIRECTION1]*

1 Set the printer to the offline. (Press ONLINE key.)

↑INK	MEDIA REG↓
←MEDIA	M.ADV→

2 Press MENU key twice to display ADJUST.

↑PRINTER	SETUP↓
←ADJUST	HEATER→

3 Press ◁ key and then OK key to display the adjustment pattern.

```
#TEST PRINTS
*NOZZLE PRINT
```

4 Press ▽ key to select [BIDIRECTION1]. Then, press OK key.

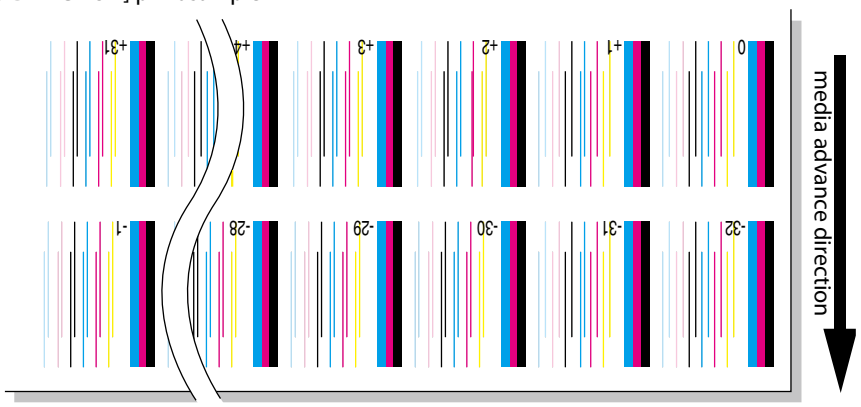
```
#TEST PRINTS
*BIDIRECTION1
```

When adjusting [NORMAL2] print mode, select [BIDIRECTION2] and adjusting [FINE DRAFT] print mode, select [BIDIRECTION3].

5 Press OK key. Then, the adjustment pattern in the figure shown below is printed.

```
#TEST PRINTS
*EXECUTING
```

[BIDIRECTION] print sample



STEP 2 *How to enter the correction value*

6 After selecting ADJUST MENU, press (v) key to display [BIDIR ADJ1 L].

When adjusting [NORMAL2] print mode, select [BIDIR ADJ2 L], adjusting [FINE DRAFT] print mode, select [BIDIR ADJ3 L]

```
#BIDIR ADJ1 L   XXXXXX
#Y      >+00
```

XXXXXX : Media name

7 Press (>) key to move the cursor and change the head color with (^), (v) keys.

This is an example of the M (magenta) color Print head adjustment.

```
#BIDIR ADJ1 L   XXXXXX
#M      >+00
```

XXXXXX : Media name

8 Press (OK) key to decide the head color to be corrected and make it ready for entering the parameter.

```
#BIDIR ADJ1 L   XXXXXX
#M      *+00
```

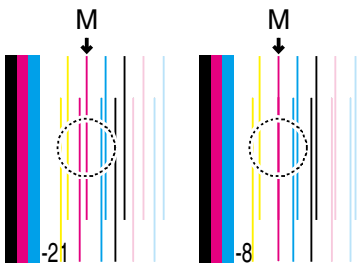
XXXXXX : Media name

9 In the [BIDIRECTION] patterns, enter the numeral of pattern where two lines of each color Print head are aligned in one.

Select the digit with (<), (>) keys and change the value with (^), (v) keys.

Enter the number of the pattern where two lines are aligned most closely.
For example, when setting the M color Print head, in "-21" in the figure to the right, two lines are separated and in "-8" two lines are aligned in one. So "-8" is the correct value.

```
#BIDIR ADJ1 L   XXXXXX
#M      >-08
```



10 Press (OK) key.

```
#BIDIR ADJ1 L   XXXXXX
#M      >-08
```

XXXXXX : Media name

11 Adjust [BIDIR ADJ1 R] using the same method.

12 Adjust other colors using the same method.

Adjustment procedure of [NOZZLE POS ADJ]

Adjust the nozzle position of each head. Enter the correction value according to the print results of nozzle adjustment patterns. The nozzle adjustment is required when the head is replaced.

STEP 1 *How to print the adjustment pattern [NOZZLE POS ADJ]*

1 Set the printer to the offline. (Press ONLINE key.)

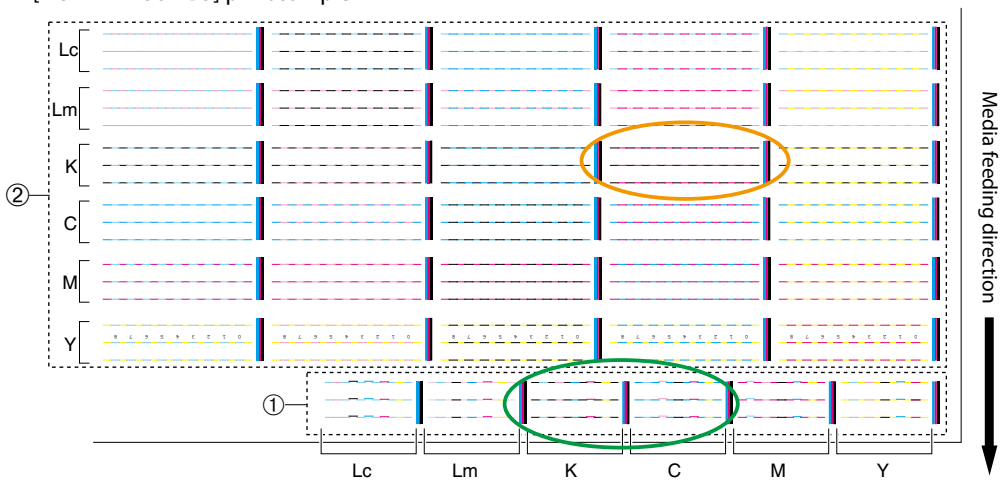
2 Press MENU key twice to display ADJUST.

3 Press ◁ key and then OK key to display the adjustment pattern.

4 Press ▽ key to select [NOZZLE POS ADJ]. Then, press OK key.

5 Press OK key. Then, the adjustment pattern in the figure shown next page is printed.

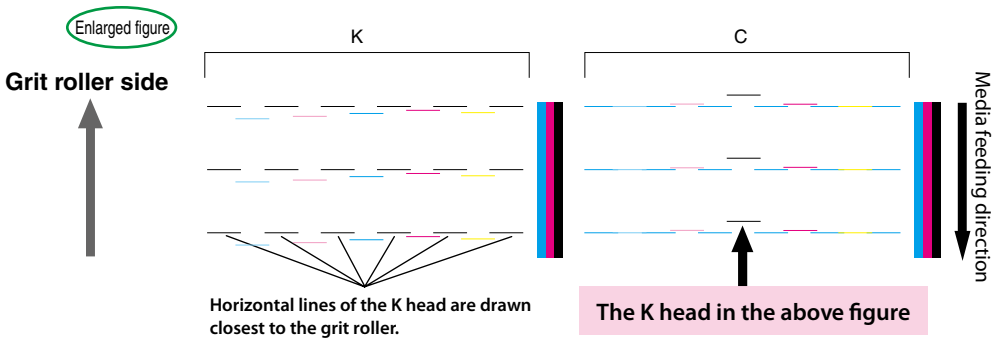
[NOZZLE POS ADJ] print sample



① **"NOZZLE POS ADJ":**

Specify the head color of the reference head.

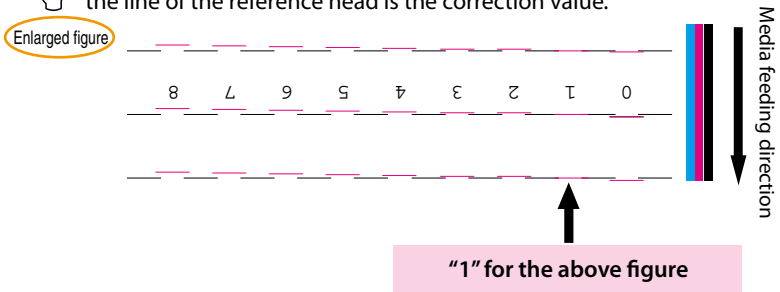
Short horizontal lines are draws for each color. "Reference head" is the color of lines drawn closest to the grit roller.


Enlarged figure
Grit roller side
K
C
Media feeding direction
Horizontal lines of the K head are drawn closest to the grit roller.
The K head in the above figure

②**"NOZZLE POS ADJ 2":**

Determine the correction value for the remaining five colors based on the color of the reference head specified in ①.

A value for the part where the line of the head to adjust is aligned with the line of the reference head is the correction value.



STEP 2 *How to enter the correction value*

6 After selecting ADJUST MENU, press (v) key to display [PH TO PH VAL].

7 Press (>) key to move the cursor and change the Print head selection with (^), (v) keys.

As an example, adjustment of the M (Magenta) head with the K (Black) head as the reference color will be described here.

8 Press (OK) key to decide the Print head color to be corrected and make it ready for entering the parameter.

9 Specify the reference head in "NOZZLE POS ADJ1," and enter the value representing a pattern showing best match among the colors of the reference head in "NOZZLE POS ADJ2."

Change the value with (^), (v) keys.

For how to determine the correction value, see P.4-37.

10 Press (OK) key.

11 Adjust other colors using the same method.

Note

- **Enter "0" to [NOZZLE POS VAL] of the reference head selected in [NOZZLE POS ADJ1].**

[PH TO PH] adjustment procedure

Adjust the head position of each Print head, using K Print head as a reference.
Read the result of [PH TO PH] print and enter the appropriate value.

STEP 1 *How to print the adjustment pattern [PH TO PH]*

1 Set the printer to the offline. (Press ONLINE key.)

↑INK	MEDIA REG↓
←MEDIA	M.ADV→

2 Press MENU key twice to display ADJUST MENU.

↑PRINTER	SETUP↓
←ADJUST	HEATER→

3 Press ◁ key and then OK key to display [TEST PRINTS].

```
#TEST PRINTS
*NOZZLE PRINT
```

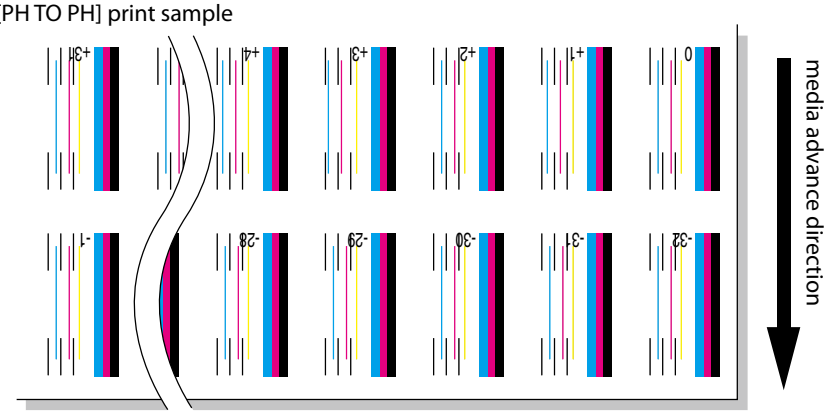
4 Press ▽ key, select [PH TO PH] and press OK key.

```
#TEST PRINTS
*PH TO PH
```

5 Press OK key. Then the adjustment pattern shown in the figure below is printed.

```
#TEST PRINTS
*EXECUTING
```

[PH TO PH] print sample



STEP 2 *How to enter the correction value*

6 After selecting ADJUST MENU, press (v) key to display [PH TO PH VAL].

```
#PH TO PH VAL
#Y      >+00
```

7 Press (>) key to move the cursor and change the Print head selection with (^), (v) keys.

This is an example of the Lc (light cyan) color Print head adjustment.

```
#PH TO PH VAL
#Lc     >+00
```

8 Press (OK) key to decide the Print head color to be corrected and make it ready for entering the parameter.

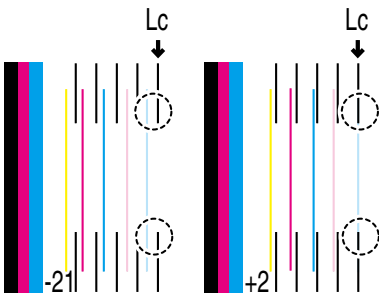
```
#PH TO PH VAL
#Lc     *+00
```

9 In [PH TO PH] patterns, enter the numeral of pattern of which the line of Print head to be set is most closely aligned with the line of K Print head.

Select the digit with (<), (>) keys and change the value with (^), (v) keys.

For the correction value, enter the numeral of pattern pf which line is most closely aligned with the line of K color Print head.
For example, when setting the Lc color Print head, in "-21" in the figure at the right hand side two lines are separated and in "+2" two lines are aligned in one. Thus, enter "+2".

```
#PH TO PH VAL
#Lc     >+02
```



10 Press (OK) key.

```
#PH TO PH VAL
#Lc     >+02
```

11 Adjust other colors using the same method.

[ADJUST PH R/L] adjustment procedure

Adjust the head position of each Print head's right and left nozzles position, using K Print head as a reference.
Read the result of [ADJUST PH R/L] print and enter the appropriate value.

STEP 1 *How to print the adjustment pattern [ADJUST PH R/L]*

1 Set the printer to the offline. (Press ONLINE key.)

↑INK	MEDIA REG↓
←MEDIA	M.ADV→

2 Press MENU key twice to display ADJUST MENU.

↑PRINTER	SETUP↓
←ADJUST	HEATER→

3 Press < key and then OK key to display [TEST PRINTS].

```
#TEST PRINTS
*NOZZLE PRINT
```

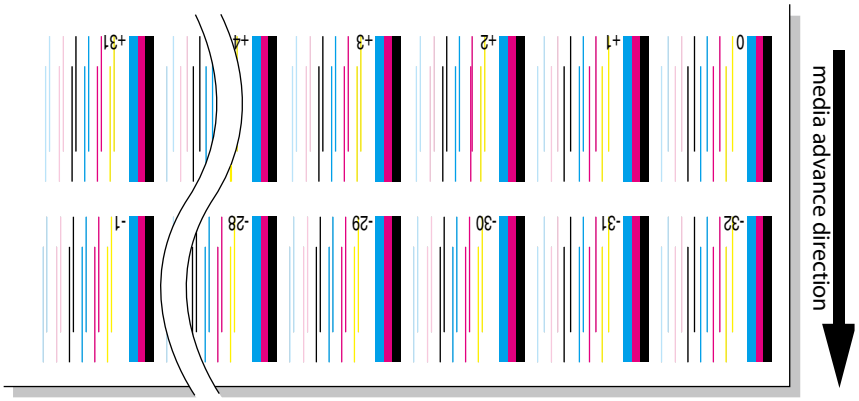
4 Press v key, select [ADJUST PH R/L] and press OK key.

```
#TEST PRINTS
*ADJUST PH R/L
```

5 Press OK key. Then the adjustment pattern shown in the figure below is printed.

```
#TEST PRINTS
*EXECUTING
```

[ADJUST PH R/L] print sample



STEP 2 *How to enter the correction value*

6 After selecting ADJUST MENU, press (v) key to display [PH R/L ADJ VAL].

```
#PH R/L ADJ VAL
#Y      >+00
```

7 Press (>) key to move the cursor and change the head color with (^), (v) keys.

This is an example of the M (magenta) color Print head adjustment.

```
#PH R/L ADJ VAL
#M      >+00
```

8 Press (OK) key to decide the head color to be corrected and make it ready for entering the parameter.

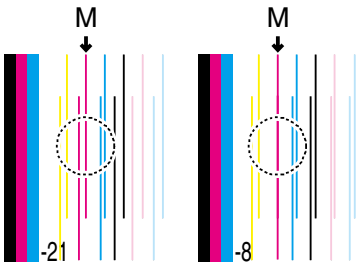
```
#PH R/L ADJ VAL
#M      *+00
```

9 In the [ADJUST PH R/L] patterns, enter the numeral of pattern where two lines of each color Print head are aligned in one.

Select the digit with (<), (>) keys and change the value with (^), (v) keys.

Enter the number of the pattern where two lines are aligned most closely.
For example, when setting the M color Print head, in "-21" in the figure to the right, two lines are separated and in "-8" two lines are aligned in one. So "-8" is the correct value.

```
#PH R/L ADJ VAL
#M      >-08
```



10 Press (OK) key.

```
#PH R/L ADJ VAL
#M      >-08
```

11 Adjust other colors using the same method.

[LS ADJ PRINT] adjustment procedure

Adjust the print position of the media. According to the print results of "LS ADJ PRINT", enter the adjustment correction value. This adjustment is required when the K head is replaced.

STEP 1 *Cut the edge of the media set to the printer with the media cutter blade.*

NOTE

- **Cut the edge of the media straight so that it is parallel to the platen. Without doing so, proper adjustment cannot be conducted.**

STEP 2 *How to print the adjustment pattern [LS ADJ PRINT]*

1 Set the printer to the offline. (Press ONLINE key.)

2 Press MENU key twice to display ADJUST MENU.

3 Press ◁ key and then OK key to display [TEST PRINTS].

4 Press ▽ key, select [LS ADJ PRINT].

5 Press OK key. Then the adjustment pattern shown in the figure below is printed.

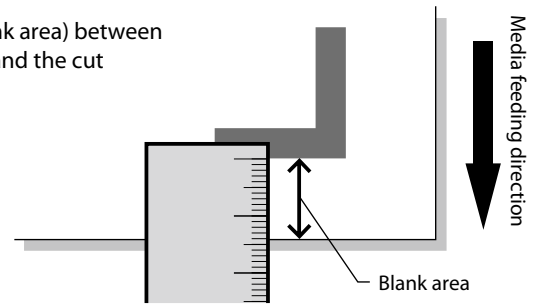
6 Press (OK) key. Then the adjustment pattern shown in the figure below is printed.

```
#TEST PRINTS
*EXECUTING
```

[LS ADJ PRINT] print sample

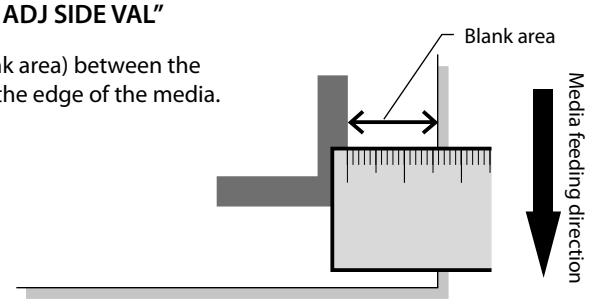
• How to measure the "LS ADJ TOP VAL"

Measure the length (blank area) between the adjustment pattern and the cut media.



• How to measure the "LS ADJ SIDE VAL"

Measure the length (blank area) between the adjustment pattern and the edge of the media.



• How to calculate the adjustment correction value

Measure the blank area with **15mm** as the reference value to obtain the adjustment correction value.

<Example>

When the blank area is **14mm** : The adjustment correction value will be **–1.0mm**.

When the blank area is **16mm** : The adjustment correction value will be **+1.0mm**.

STEP 2 *How to enter the correction value*

As an example, the case that the "LS ADJ TOP VAL" is +1.0mm and the "LS ADJ SIDE VAL" is -1.0mm will be described here.

7 After selecting ADJUST MENU, press (v) key to display [LS ADJ TOP VAL].

8 Press (OK) key and make it ready for entering the parameter.

9 Enter the adjustment correction value.
Select the digit with (<), (>) keys and change the value with (^), (v) keys.
For how to determine the correction value, see P.4-44.

10 Press (OK) key.

11 press (v) key to display [LS ADJ SIDE VAL].

12 Press (OK) key and make it ready for entering the parameter.

13 Enter the adjustment correction value.

Select the digit with ⟨, ⟩ keys and change the value with ⟨^⟩, ⟨v⟩ keys.

For how to determine the correction value, see P.4-44.

14 Press ⟨OK⟩ key.

Adjustment of take-up reel unit

As the state of roll media during operation always changes depending on the state of roll media finishing (uneven wound) and the environment during printing (such as temperature and humidity), wind the roll media while adjusting.

Step 1
Before printing / take-up·····→ Initial adjustment

Step 2
Problem during take-up ·····→ Adjustment during operation

Initial adjustment

Note

- **When executing the initial adjustment, set the take-up switch to OFF. (☞ P.2-21 [Take-up switch setting])**

1 Print the adjustment pattern [TUR ADJ PRINT].

HINT
- Shift the blower unit to prevent any interference with the operation.
- Instead of normal paper that is subject to being influence by temperature and humidity, a film is recommended.

■ How to print the adjustment pattern (In case of printing [TUR ADJ PRINT])

1 Set the printer to the offline. (Press ONLINE key.)

2 Press MENU key twice to display ADJUST.

3 Press ◁ key and then OK key to select the parameter (adjustment parameter name)

4 Select [TUR ADJ PRINT] with ▽, △ keys and press OK key.

5 Press OK key. Then, after warmed up, the adjustment pattern [TUR ADJ PRINT] is printed.

<LCD display>

```
↑INK          MEDIA REG↓
←MEDIA          M.ADV→
```

```
↑PRINTER          SETUP↓
←ADJUST          HEATER→
```

```
#TEST PRINTS
*NOZZLE PRINT
```

```
#TEST PRINTS
*TUR ADJ PRINT
```

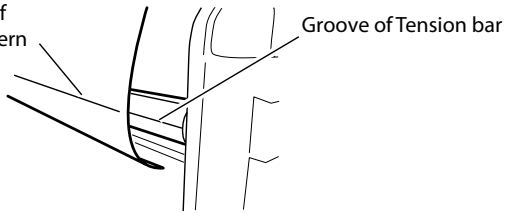
↓ OK

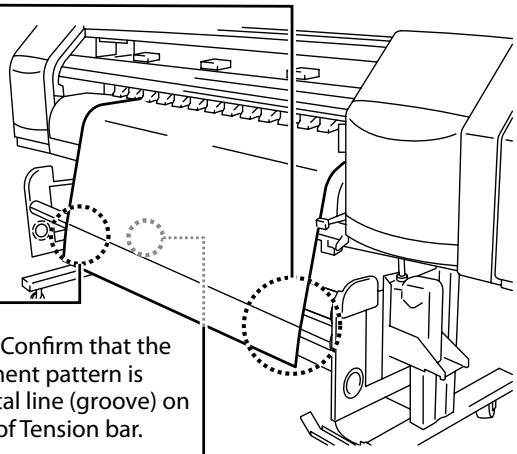
```
#TEST PRINTS
*OK ?
```

```
#TEST PRINTS
*EXECUTING
```

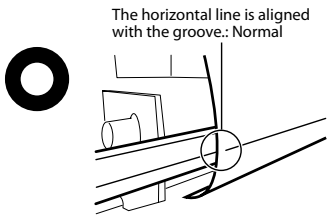
2 Observe the horizontal line of adjustment pattern and the position of groove of Tension bar with the line. Adjust using the procedure below.

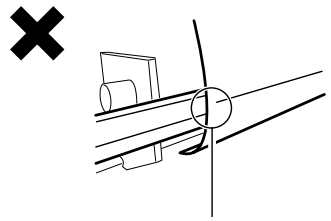
2-1 First, adjust the right side. Align the horizontal line of adjustment pattern with the horizontal line (groove) on the outer circumference of Tension bar.



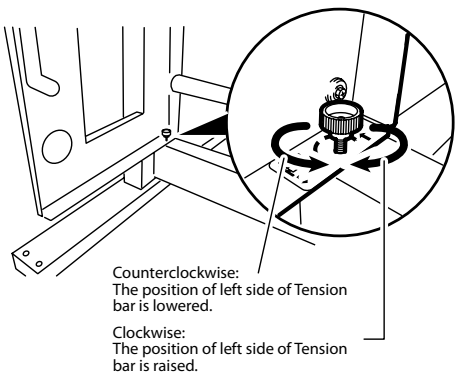


2-2 Next, adjust the left side. Confirm that the horizontal line of adjustment pattern is aligned with the horizontal line (groove) on the outer circumference of Tension bar.



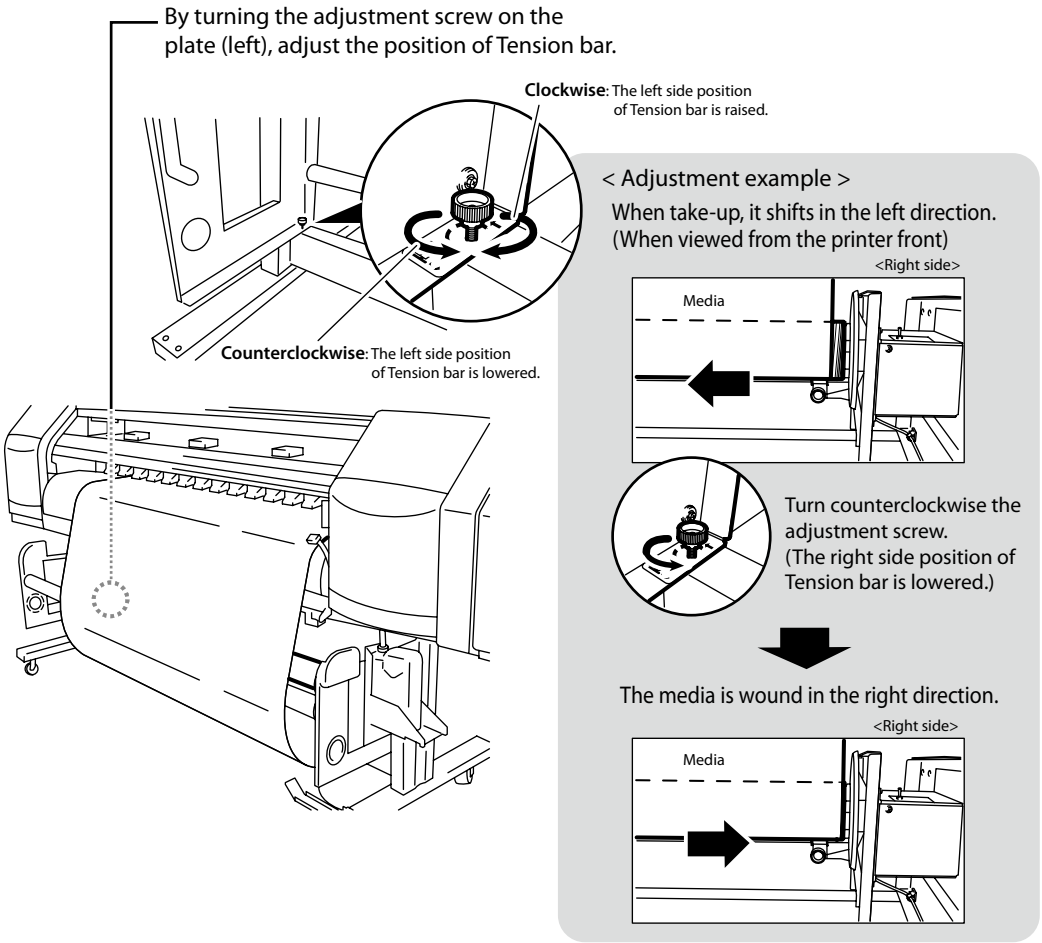


2-3 Turn the adjustment screw on the plate (left) to move up or down so that the shift is within the allowable range (about 1mm).


Counterclockwise:
The position of left side of Tension bar is lowered.
Clockwise:
The position of left side of Tension bar is raised.

Adjustment during operation

If the adjustment is left in the initial adjustment state, depending on this state of media, the winding defect such as uneven wound may occur.
In this case, avoid the symptom by turning the adjustment screw on the plate (left).


By turning the adjustment screw on the plate (left), adjust the position of Tension bar.
Clockwise: The left side position of Tension bar is raised.
Counterclockwise: The left side position of Tension bar is lowered.
< Adjustment example >
When take-up, it shifts in the left direction. (When viewed from the printer front)
<Right side>
Media
Turn counterclockwise the adjustment screw. (The right side position of Tension bar is lowered.)
The media is wound in the right direction.
<Right side>
Media

Note

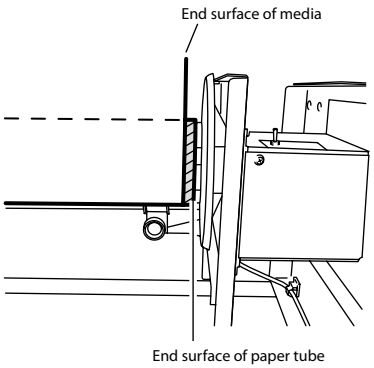
- **Adjustment may be needed several times during a long print, depending on the condition of the media.,**

When moving the roll media position to the printer, The plate (right) needs to be positioned to meet the media.

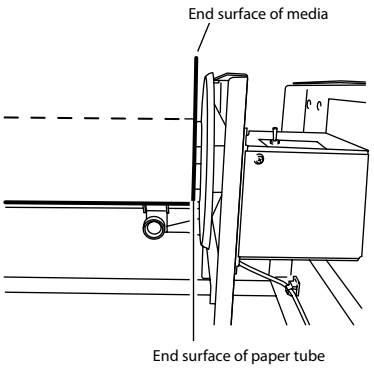
Note

- **Align the end of media with the end of paper tube.**

The end surface of media is shifted from the end surface of paper tube.
>> The adjustment is necessary.



The end surface of media is matched with the end surface of paper tube.
>> Normal



5 Troubleshooting

Section 5 describes procedures to follow when encountering problems. If these procedures do not solve the problem, contact your dealer or Seiko I Infotech.

(Content in this section)

When Encountering a Problem..... 5-2
How to clear media jams..... 5-6
When an error message is displayed 5-7
When the warning message is displayed 5-13
How to get good image quality.....5-15
Abnormal sound.....5-25

When Encountering a Problem

When encountering a problem, refer to the following sections for possible solutions .

No power

Symptom/Possible Problem	Resolution
Connection state of power cable	Connect correctly the power cable to the outlet.
Power supply to the outlet	Supply the power to the outlet. Confirm that the power voltage is correct.
ON/OFF state of power switch	Turn on the power switch. (☞**P.2-3 [Power ON/OFF Procedure]**)

The paper guide does not heat after the heater is turned on.

Symptom/Possible Problem	Resolution
Printer status	The paper guide is heated during printing or when the heater is turned on with the heater control menu. Print an image or set the heater to ON to see if the paper guide is heated. (☞**P.2-41 [Changing temperature using the heater control menu]**)
Computer RIP setting	The heater temperature can also be set by the RIP of the computer. Check the computer setting.
Heater control menu	Turn on the heater (front heater/print heater/rear heater) again, and then print an image or forcibly set the heater to ON to see if the paper guide is heated.

The printer does not start up or operate.

Symptom/Possible Problem	Resolution
Error LED ON and the message displayed on the LCD	Take action directed by the error message. (☞**P.5-7 [When the error message is displayed]**)

No printing

Symptom/Possible Problem	Resolution
Interface cable not connected correctly	Connect the interface cable correctly. (☞**P.2-2 [Connection to a computer]**)
Error LED ON and the message displayed on LCD	Take action directed by the error message. (☞**P.5-7 [When the error message is displayed]**)
Error lamp OFF	Print the test image. (☞**P.3-50 "NOZZLE PRINT" of [ADJUST MENU[TEST PRINTS]]**) ([Test Pattern] of software RIP])
Clean the Print head	Run the Print head cleaning. (☞**P.4-19 [Print head cleaning]**)

Although the printer is in the print mode, printing does not start with "PH WARMING UP" displayed on the operation panel.

Symptom/Possible Problem	Resolution
Room temperature	Raise the room temperature. (Recommended temperature: 20 to 25ºC)

HINT

- Head warming-up is conducted when the room temperature (temperature inside the printer) is low. Recommended room temperature is 20 to 25˚C.
- When the low room temperature is raised to 20 to 25˚C, it takes time before the temperature inside the printer increases. Idle the printer for more than 1 hour before restarting printing.
- When the cancel key is pressed "PH warming-up", head warming-up is terminated to start printing. (By turning off the head warm mode, head warming-up is automatically canceled.).
- When head warming-up is canceled, the carriage stops at the certain number of scan. (If the number other than 0 is preset as PH REST PERIOD in MEDIA REG MENU, the value preset in PH REST PERIOD and PH REST TIME is used.)
- Head warming-up is a function for stable printing. Do not cancel head warming-up as much as possible.

Although the printer is in the print mode, printing does not start with "PREHEATING" displayed on the operation panel.

Symptom/Possible Problem	Resolution
Room temperature	Raise the room temperature. (Recommended temperature: 20 to 25ºC)
Affect of air flow	If the air from the air conditioner or fan is blowing against the paper guide, avoid the air flow (by changing air flow direction, orientation of the printer or the location of the printer).

Delayed printing after sending data

Symptom/Possible Problem	Resolution
Online LED (Blinking)	Check the communication between the printer and computer.

Poor image quality

☞Refer to **P.5-15 [How to get good image quality].**

White paper

Symptom/Possible Problem	Treatment
Ensure the correct file is being sent to the printer	Confirm the transfer of data to the printer and the correct file.

Media jams

Symptom/Possible Problem	Resolution
Type of media	Confirm the type of set media matches with the media loaded. (☞**P.2-7 [Media replacement]**)
State of media set	Set correctly the media. (☞**P.2-7 [Media replacement]**)
An obstacle is caught in the carriage path.	Remove the obstacle. (☞**P.5-6 [How to clear the media jams])**
An obstacle is caught in the media path.	Remove the obstacle. (☞**P.5-6 [How to clear the media jams])**

Slow printing

Symptom/Possible Problem	Resolution
Low temperature environment	When the temperature in the printer is low (lower than 20°C), the printing speed is slowed down. Set the environment temperature to the recommended temperature (20 to 25° C), idle the printer for more than 1 hour before restarting printing.
High temperature environment	When the temperature in the printer is high (higher than 40°C), the printing speed is slowed down. Set the environment temperature to the recommended temperature (20 to 25° C), idle the printer for more than 1 hour before restarting printing
USB transfer speed	Confirm the transfer speed of USB. In case of full speed connection, change the connection environment to achieve the high speed connection with the computer.

The menu display becomes other language

Symptom/Possible Problem	Resolution
Language setting	While pressing (MENU) key, power on the printer. When, the printer starts up and the language setting menu is displayed. Set the language to your desired one

How to clear media jams

The error message below is displayed below, perform the procedure described below.

1 The message is displayed.

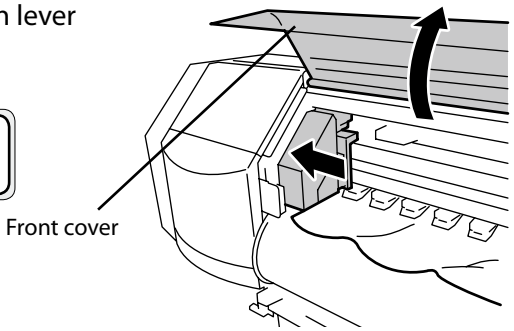
```
WARNING! (X)
CLEAR MEDIA JAM
```

X : Type of jammed media (media stack)

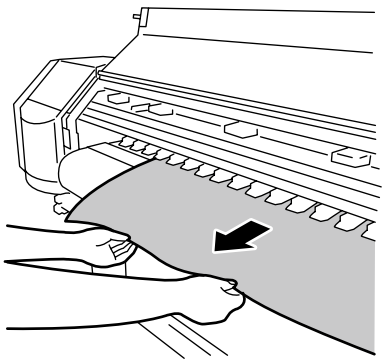
☞P.5-7 [When an error message is displayed]

2 Raise the Pressure roller up/down lever and open the Front cover.

```
REMOVE MEDIA
```



3 Remove the jammed media, confirm that no obstacle exists on the carriage path and the media transport path and close the Front cover.



Note

- **With roll media, rewind the media once completely.**

```
CLOSE COVER
```

```
CARRIAGE MOVING
PLEASE WAIT
```

4 After this, refer to [Roll media installation/removal procedure], set the media.
(☞P.2-7)

Note

- **Due to the media jamming, the Print head scrubs the media and the lost print may occur. In this case, execute the cleaning of Print head.**
  (☞P.4-19 [Print head cleaning])

When an error message is displayed

When the error LED lights, first confirm the message displayed on the LCD.
The error messages are classified into two shown below.

Service call error :

This error indicates the hardware and software troubles that an operator (customer) cannot resolve. Contact your dealer or Seiko I Infotech for service.

Operator call error :

This error indicates the trouble that an operator (customer) can resolve it. Resolve according to the message.

Messages that follow after this are the error message.
According to the error message displayed on the LCD, resolve properly.

Service call error

- When the service call error show below is displayed, turn off and on the power switch once to start up the printer again. The error may be released.

Note

- **Wait for more than 1 minute after turned off when turning on the power switch again.**

(system error)

SYSTEM ERROR nnnn POWER OFF/ON

nnnn : error code

Meaning	The unresolveable error occurs.
Resolution	Contact your dealer or Seiko I Infotech for service. At this moment, inform of the displayed error code.

Operator call error

Error messages shown below can be resolved by an operator.

(Ink cartridge)

REPLACE YY INK CARTRIDGE	YY : Y, M, C, K, Lm, Lc

Meaning	The ink cartridge is empty.
Resolution	Resolve according to the message. (☞**P.2-46 [Ink cartridge replacement]**)

CHECK Z YY INK CARTRIDGE	YY : Y, M, C, K, Lm, Lc Z : Error code (0 ~ 9)

Meaning	The abnormality occurs in the ink cartridge.
Resolution	Resolve according to the message. (☞**P.2-46 [Ink cartridge replacement]**)

INSTALL YY INK CARTRIDGE	YY : Y, M, C, K, Lm, Lc

Meaning	An ink cartridge is not installed.
Resolution	Resolve according to the message. Even if the ink cartridge is installed, when this message appears, suspect the improper installation of ink cartridge. Then, confirm that the ink cartridge is properly installed. (☞**P.2-46 [Ink cartridge replacement]**)

(Waste ink bottle)

BOTTLE OUT INSTALL BOTTLE

Meaning	A Waste ink bottle is not installed.
Resolution	Resolve according to the message. (☞**P.2-48 [Waste ink bottle replacement]**)

BOTTLE FULL REPLACE BOTTLE

Meaning	The Waste ink bottle is fully filled.
Resolution	Resolve according to the message. (☞**P.2-48 [Waste ink bottle replacement]**)

(Media jam)

WARNING! (0) CLEAR MEDIA JAM

Meaning	The media jam (0) occurs when an obstacle exists transporting path and the printer cannot drive.
Resolution	Resolve according to the message. If no obstacle exists on the media transport path, and the media jam (0) occurs often, contact your dealer or Seiko I Infotech for service. (☞ **P.5-6 [How to clear media jams])**

WARNING! (1) CLEAR MEDIA JAM

Meaning	The media jam (0) occurs when an obstacle exists on the media transporting path and the printer cannot advance.
Resolution	Resolve according to the message. If no obstacle exists on the media transport path, and the media jam (0) occurs often, contact your dealer or Seiko I Infotech for service. (☞**P.5-6 [How to clear the media jams])**

WARNING! (2)
CLEAR MEDIA JAM

Meaning	The media jam occurs when the media is not correctly detected. In such cases as wrong media selection of roll media and cut media and employing the media other than the cut media of specified size length.
Resolution	Resolve according to the message. Moreover, confirm the content of setting. (☞**P.5-6 [How to clear the media jams])**

(Media)

NO MEDIA LOADED
LOAD MEDIA

Meaning	The media is finished.
Resolution	Set a new media. (☞**P.2-7 [Media replacement]**)

MEDIA SIZE ERROR
LOAD MEDIA

Meaning	A media of invalid size (less than 297 mm, wider than 64 inches size in width) is set.
Resolution	Set a correct size media. (☞**P.2-7 [Media replacement]**)

MEDIA MISALIGNED
RELOAD MEDIA

Meaning	The skew occurs on the media.
Resolution	Set the media correctly. Depending on the occurrence of skew, the ink may be vomited on the platen. In this case, wipe off the ink on the platen. (☞**P.2-7 [Media replacement], P.4-15 [Cleaning the platen]**)

LOAD MEDIA
LOWER LEVER

Meaning	The Pressure roller up/down lever is raised.
Resolution	Resolve according to the message, set the media again.

(Print head)

PH TEMP. ERROR
PLEASE WAIT

Meaning	The temperature of Print head is out of the operating temperature range.
Resolution	Use the printer within the operating temperature environment. Rest the printer for a while and use it after the temperature drops.

XX PH INFO ERROR
CHECK PRINTHEAD

Meaning	This message occurs in the head information.
Resolution	Execute [RESEAT PRINTHEAD] of PH.MAIN MENU and confirm the connection of head connector. By plugging out and in the connector, the error may be released.

XX PH TEMP ERROR
CHECK PRINTHEAD

Meaning	The head temperature error is detected.
Resolution	Execute [RESEAT PRINTHEAD] of PH.MAIN MENU and confirm the connection of head connector. By plugging out and in the connector, the error may be cleared.

XX PH DETECT ERROR
CHECK PRINTHEAD

Meaning	The error of no head is detected.
Resolution	If the Print head is installed, execute [RESEAT PRINTHEAD] of PH.MAIN MENU and confirm the connection of head connector. By plugging out and in the connector, the error may be cleared.

(Other)

CLOSE COVER

Meaning	The cover is open.
Resolution	Close the cover.

ENV. TEMP. ERROR
CHANGE ENV TEMP

Meaning	The ambient temperature is out of the printer operating temperature range.
Resolution	Use the printer within the printer operating temperature (15℃ to 30°C).

When the warning message is displayed

After finishing the online print, if any warning information exists, the following warning message is displayed and the ERROR LED ⚠ blinks.
Follow the message to resolve.

PERFORM DAILY
MAINTENANCE NOW

Meaning	When the regular maintenance (cap cleaning) is not performed, this message is displayed.
Resolution	Perform the regular maintenance (cap cleaning). (☞**P.4-2 [Periodic maintenance]**)

SERVICE NEEDED
CALL SERVICE

Meaning	This message is displayed when the life of supply tube pump assembly nearly expires.
Resolution	Contact your dealer or Seiko I Infotech for service of the supply pump.

REPLACE
WIPER BLADE

Meaning	This message is displayed when the life of Wiper blade nearly expires.
Resolution	Execute [REPLACE WIPER BLADE]of PH.MAIN MENU and replace the Wiper blade. (☞**P.4-21 [Wiper blade replacement]**)

REPLACE
WIPER SPONGE

Meaning	This message is displayed when the life of Wiper sponge nearly expired.
Resolution	Execute[REPLACE WIPE SPONGE]PH.MAIN MENU and replace the Wiper sponge. (☞**P.4-25[Wiper sponge replacement]**)

REPLACE
WIPE CLEANING LIQUID

Meaning	This message is displayed when the life of cleaning liquid nearly expires.
Resolution	Execute [Wiper cleaning liquid replacement] in the service menu to replace the wiper cleaning liquid. (☞**P.4-23 [Wiper cleaning liquid replacement]**)

SERVICE NEEDED
CALL SERVICE

Meaning	This message is displayed when the life of cap nearly expires.
Resolution	Contact the service depot and implement the cap unit replacement.

SERVICE NEEDED
CALL SERVICE

Meaning	This message is displayed when the life of SUS belt nearly expires.
Resolution	Contact the service depot and implement the SUS belt replacement.

After finishing the online print, if any warning information on the ink cartridge exists, the following warning message is displayed and the ERROR LED blinks. According to the message, resolve properly.

YY INK NEAR
EXPIRATION DATE

The ink LED blinks.
YY : ink color

Meaning	The expiration date of ink in use is approaching.(warning)
Resolution	Install a new ink cartridge. (☞**P.2-46 [Ink cartridge replacement]**)

• The ink LED blinks. :

Meaning	This message indicates that the remaining of ink is little expiration date of ink in use approaches. (warning)
Resolution	Install a new ink cartridge. (☞**P.2-46 [Ink cartridge replacement]**)

How to get good image quality

This section provides suggestions for a customer to get better image quality from the printer. Resolve the issue based on the symptom.

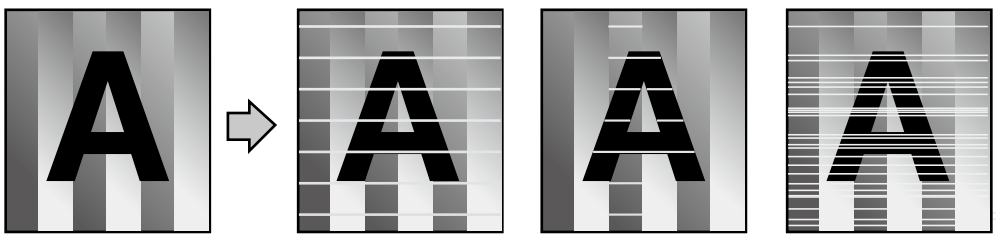
Note

- **When several Resolutions are described, they are described in the order of most effective ones. It is recommended to implement the Resolution at the top first and confirm the effect on the improvement. (But, it is not necessary to implement all of the Resolutions.)**

Light print

Symptom/Possible Cause	Resolution
The operating environment is out of the printer specification.	Raise the room temperature to higher than 15°C (recommended temperature : 20 to 25°C)so that the printer sufficiently warms up.
The media selection does not matched.	Confirm the selection of the media used is correct (☞P.3-21)

White lines on the print



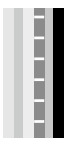
Basic image

[Cause]
The media advance is not properly adjusted.

[Reference]
When the color stripe is printed, white lines appears on all colors.

[Cause]
The lost print of Print head

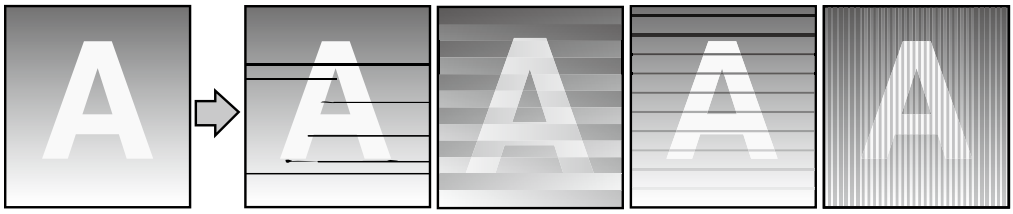
[Reference]
When the color stripe is printed, white lines appears on all colors.



[Cause]
Matching with the media is not good. / The ink dries fast.

Symptom/Possible Cause	Resolution
The media advance is not properly adjusted. HINT - [Suggestions for media advance value] (☞**P.5-22**)	(1) Print in the image improvement [MEDIUM] or [HIGH]. (☞**P.3-34**) (2) Print the media advance adjustment pattern and adjust the media advance value. (☞**P.4-28**) (3) Change the pressure force using the Pressure roller up/down lever. (☞**P.2-34**) (4) Print the media advance adjustment pattern again and adjust the media advance value.(☞**P.4-28**) (5) Print in the uni-direction print mode. (☞**P.3-26**) (6) Print in the print mode [QUALITY]. (☞**P.3-25**)
Clogged Nozzles	(1) Check that there is no dust on the platen, if any, remove it. (☞**P.4-15**) (2) Perform the regular maintenance.(☞**P.4-3**) (3) Implement (NORMAL ALL). (☞**P.4-19**) After this, run the nozzle print and confirm that the lost print is improved. (☞**P.4-8**) (4) Clean the surface of Print head (☞**P.5-23**) After this, run the nozzle print and confirm that the lost print is improved.(☞**P.4-8**) HINT - By adding the color stripe when printing, the incidence of clogged nozzles will be reduced. (☞**P.3-31**)
Matching with the media is not good. / The ink dries fast.	(1) Print the media advance adjustment pattern and adjust the media advance value. (☞**P.4-28**) HINT - [Suggestions for media advance value] (☞**P.5-22**) (2) Raise the heater temperature. (☞**P.2-41**) (3) Print in the print mode [QUALITY] (☞**P.3-25**) (4) Print in the uni-direction printing. (☞**P.3-26**) (5) Print in the print mode [DENSITY] (☞**P.3-25**) (6) Print using the known good media that has been used in the past

Dark lines on the print



Basic image

[Cause]
The area around the Print head is stained

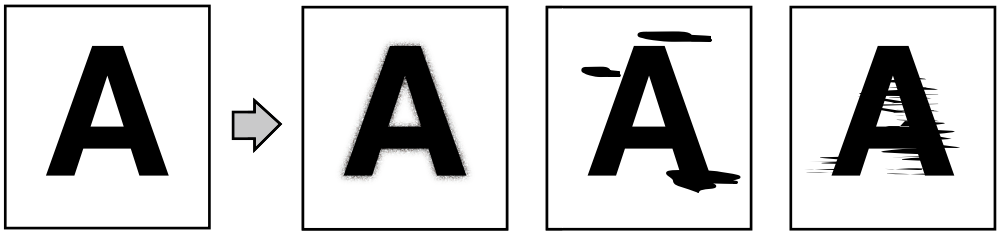
[Cause]
Different order of ink blowing due to bi-direction printing

* Black lines in the lateral direction
[Cause]
- The media advance is not properly adjusted.
- The ink dries slowly.

* Black lines in the vertical direction
[Cause]
- Ink does not penetrate into the media due to its surface condition.
- The small error of the ink droplet position on the media.

Symptom/Possible Cause	Resolution
The area around the Print head is stained.	(1) Clean the surface of Carriage base. (☞**P.4-16**) (2) Clean the Head guard (☞**P.4-17**) (3) Raise the height of Print head. (☞**P.2-44**)
Different order of ink layering due to bi-direction printing	(1) Print in the image improvement [MEDIUM] or [HIGH]. (☞**P.3-34**) (2) Print in the uni-direction print. (☞**P.3-26**) (3) Print in the print mode [QUALITY]. (☞**P.3-25**)
The media advance is not well adjusted. HINT - [Suggestions for media advance value] (☞**P.5-22**)	(1) Print in the image improvement [MEDIUM] or [HIGH]. (☞**P.3-34**) (2) Print the media advance adjustment pattern and adjust the media advance value. (☞**P.4-28**) (3) Change the pressure force using the Pressure roller up/down lever. (☞**P.2-34**) (4) Once again, print the media advance adjustment pattern and adjust the media advance value. (☞**P.4-28**) (5) Print in the uni-direction printing. (☞**P.3-26**) (6) Print in the print mode [QUALITY]. (☞**P.3-25**)
The ink dries slowly.	(1) Raise the heater temperature. (☞**P.2-41**) (2) Print in the uni-direction printing. (☞**P.3-26**) (3) Print in the print mode [QUALITY]. (☞**P.3-25**)
Dark lines in the vertical direction	(1) Print in the image gradient [HIGHLIGHT2]. (☞**P.3-31**)

Stain on the print



Basic image

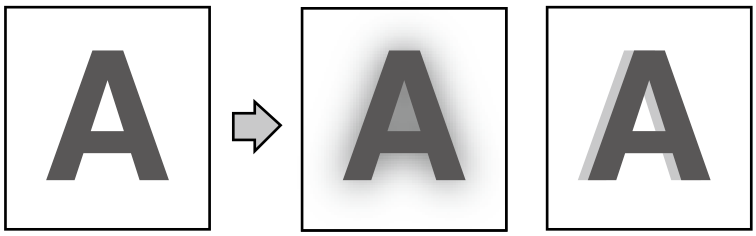
[Cause]
Ink spray

[Cause]
Ink drooling

[Cause]
Print head scratched by media (wrinkled media)

Symptom/Possible Cause	Resolution
Ink spray	(1) Print in the image gradient [HIGHLIGHT1] or [HIGHLIGHT2].(☞**P.3-31**) (2) Check the height (low) of the Print head. (☞**P.2-44**) (3) Perform the regular maintenance. (☞**P.4-3**) (4) Run the cleaning (NORMAL ALL). (☞**P.4-19**) (5) Check the environment temperature. (recommended temperature 20 to 25℃) (6) Replace the media with a media that has been used up to now.
Ink drooling	(1) Check that no wrinkles or rising exists on the media or that the media is slantingly set. Set the media again. (☞**P.2-7**) (2) Check the height (high) of the Print head. (☞**P.2-44**) (3) Run the Print head cleaning (NORMAL ALL). (☞**P.4-19**) (4) Perform the regular maintenance. (☞**P.4-3**) (5) Clean the Print head surface. (☞**P.5-23**)
Print head scratched by media (wrinkled media)	(1) Load the media again. (☞**P.2-7**) (2) Raise the height of the Print head. (☞**P.2-44**) (3) Raise the heater temperature. (☞**P.2-41**) (4) Replace the media. (☞**P.2-7**) (5) Reduce the environment humidity. (The media may soak resulting in wrinkle.) (6) Check that the head securing screws are not loosened. (☞**P.2-44**)

Bleeding on the print



Basic image

[Cause]
The ink dries slowly. / Too much ink

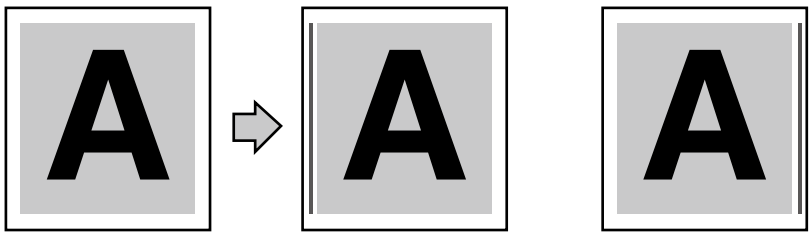
[Cause]
Shift of the Print head position / Shift of the Print head bi-direction position

Symptom/Possible Cause	Resolution
The ink dries slowly. / Too much ink	(1) Raise the heater temperature. (☞**P.2-41**) (2) Print in the image gradient [HIGHLIGHT1] or [HIGHLIGHT2].(☞**P.3-31**) (3) When printing in the print mode [DENSITY], change it to [QUALITY]. (☞**P.3-25**) (4) When printing in the [BI-DRECTION] print mode, change it to [UNI-DIRECTION]. (☞**P.3-26**)
Shift of the Print head position / Shift of the Print head bi-direction position (horizontal ghosting)	(1) Adjust the Print head position. (☞**P.4-39**) (2) Adjust the bi-direction of Print head. (☞**P.4-34**)

The lost print occurs at the start of printing.

Symptom/Possible Cause	Resolution
Out of the operating temperature and humidity range	Use the printer within the operating temperature and humidity range. (☞**P.1-3**)

Vertical lines at the edge of print

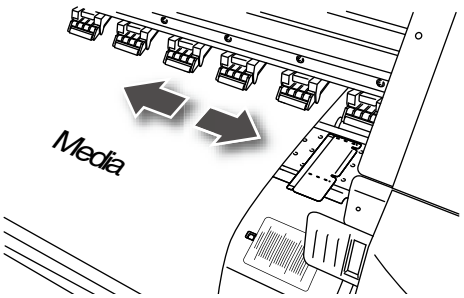


Basic image

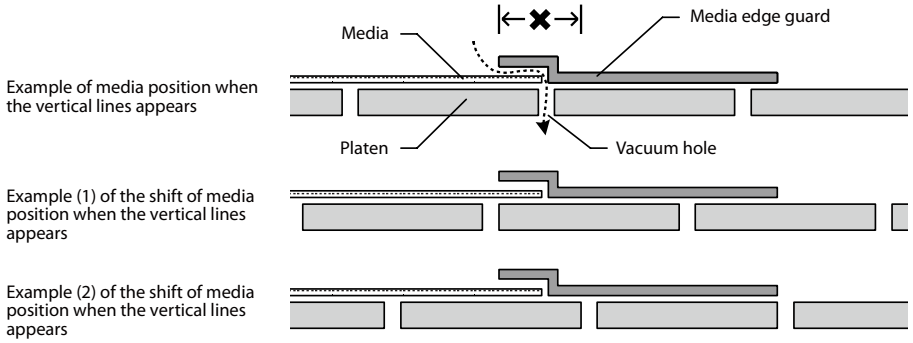
[Cause]
On the platen, the contact of left edge of media to the media edge guard locates near the vacuum hole.

[Cause]
On the platen, the contact of right edge of media to the media edge guard locates near the vacuum hole.

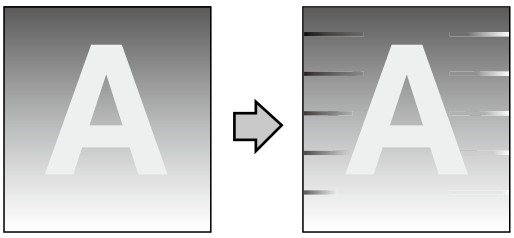
Symptom/Possible Cause	Resolution
When the edge of media under the edge guard is near the vacuum hole on the platen, ink is drawn through the clearance between media and edge guard that may cause Vertical lines .	(1) Shift the media so that the contact of edge of media on the platen to the media edge guard does not locate near the vacuum. (☞**P.2-7**)



* Shift the media so that the vacuum hole does not come within this range.


Media
Media edge guard
Platen
Vacuum hole
Example of media position when the vertical lines appears
Example (1) of the shift of media position when the vertical lines appears
Example (2) of the shift of media position when the vertical lines appears

Banding different at right and left appears on the print.

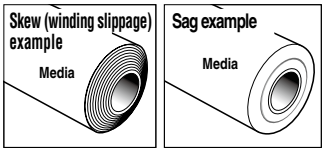


Basic image

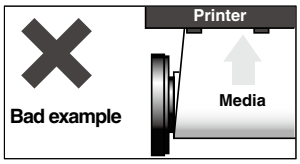
[Cause]
The media is slantingly advanced.

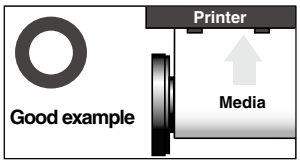
Symptom/Possible Cause	Resolution

The media is slantingly advanced.

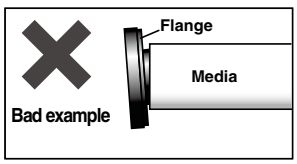


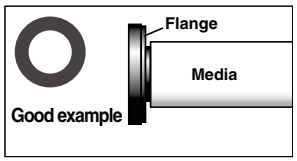
(1) Check that the media on the roll is straight. If is not , replace it .





(2) Check that the media is traveling straight off the roll. If not, adjust the position of the flange holder or shift the media right or left by raising the Pressure roller up/down lever to set the media vertically. In addition, when using the take-up reel unit, adjust the position of flange at the take-up side or re-set the media. (☞**P.2-7**)

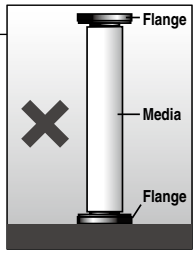




(3) Confirm that the media is loaded straight against the flange. If not, set the media again so that it is straight. (☞**P.2-7**)
(4) Confirm that the flange is not loose. Re-tighten the knob of the flange.

Note

- **If the media with the flange installed is stood on end, the media alignment on the roll will become the source of a possible problem.**



Suggestions for media advance value

The changes mentioned below can cause media advance value to vary.

Condition	Hint
■ Variation of media condition Depending on (1) type of media, width and roll length and (2) change of roll diameter as used, the appropriate media advance value varies.	In addition to the factors mentioned to the left, even if the media type is same, non-uniformed manufacturing can cause the media advance to vary. Therefore, when replacing a roll, setting the media advance value must be performed. (☞**P.4-28**)
■ When changing the take-up mode of the winding equipment, the appropriate media advance value varies.	When setting to [loose winding], the appropriate media advance value is greater than [tension winding]. (☞**P.3-28**)
■ When changing the print mode, the appropriate media advance value will vary.	The greater the number of passes is, the greater the correct media advance value will be. (☞**P.3-25**)
■ The appropriate media advance value differs in the Print heads of each color.	Normally, it is recommended to set the averaged value of 4 colors. However, set the important color suitable for print data.
■ The correct media advance value differs between right and left sides of media.	Normally, it is recommended to set the averaged value of right and left values. However, set the important position suitable for print data as a top priority.
■ When media is easy to adhere to the paper guide like banner.	It is recommended that you set the media advance correction value by printing the media advance correction pattern and then make adjustment while changing the correction value during printing of an actual image.

HINT

- After setting the media advance value determined from the media advance adjustment pattern, it is possible to improve image quality further by adjusting the media advance value while printing.
(☞**P.4-32 [Change during online printing]**)

■ Cleaning of Print head surface

When clogged nozzles is not solved after performing print head cleaning, the print head surface may be contaminating the print. Clean using the following procedure.

Note

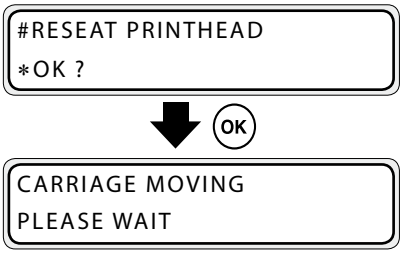
- **As many fine nozzles are arranged precisely on the Print head surface, cleaning may risk to damage the Print head. Therefore, follow the procedure in [How to get good image quality] (☞P.5-15), and perform the cleaning.**

1 Set the printer to the offline. Press MENU key to display the PH.MAIN MENU.

2 Press (>) key to enter in the PH.MAIN MENU. Then, the cap cleaning menu is displayed.

3 Select [RESEAT PRINTHEAD] using (v) key and press (OK) key.

4 When the confirmation menu is displayed, press (OK) key.
Then, the carriage moves.

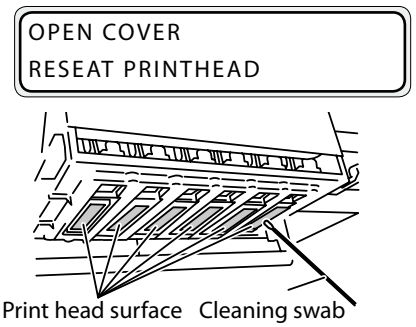


5 Open the Front cover and then the Maintenance cover.

6 While checking visually, wipe the Print head surface back and forth lightly with a Cleaning swab soaked with cap cleaning liquid.

After finishing the cleaning, close the Maintenance cover and the Front cover.

The Print head automatically returns to the original position.



Note

- **Do not leave the Print heads away from the Capping unit unnecessarily. The Print heads can dry out, causing additional problems.**
- **When wiping the Print head surface, be careful for cap cleaning liquid not to enter in your eyes and mouth.**

Abnormal sound

If you hear abnormal sound in the operating sound comparing with the normal one, contact your dealer or Seiko I Infotech.

6 Use of generic consumables

Section 6 describes precautions and procedures to follow when using re-filled ink cartridges and any generic products including ink cartridges and cleaning liquid.
SIIT highly recommends you to use SIIT standard inks only in the printer.
Generic inks have the potential to cause damage to the printer, and SIIT reserves the right to void the warranty if any issue is deemed by SIIT to be caused in part by the use of non-SIIT inks.

(Content in this section)

Printer warranty and safety issues 6-2
Use of generic consumables 6-3

Printer warranty and safety issues

Printer warranty

SIIT highly recommends you to use SIIT standard inks only in the printer.
Generic inks have the potential to cause damage to the printer, leading to interference in normal operation, and SIIT reserves the right to void the warranty if any issue is deemed by SIIT to be caused in part by the use of non-SIIT inks.
Before using generic inks, carefully read P.6-3 [When using generic consumables].

Safety issues

The consumables specified by Seiko I Infotech use carefully-selected human friendly materials as much as possible. All the required information is disclosed on the MSDS.
Before using generic consumables, obtain information from the manufacturer for safety confirmation. However, SIIT highly recommends you to use SIIT standard consumable products only in the printer.
Generic products have the potential to cause damage to the printer, and SIIT reserves the right to void the warranty if any issue is deemed by SIIT to be caused in part by the use of non-SIIT products.

Use of generic consumables

The printer is designed to offer the best performance with using specified ink and ink cartridges.
Though re-filled or generic ink cartridges can be used, SIIT highly recommends you to use SIIT standard inks only in the printer.
Generic inks have the potential to cause damage to the printer, leading to interference in normal operation, and SIIT reserves the right to void the warranty if any issue is deemed by SIIT to be caused in part by the use of non-SIIT inks.

When generic consumables are used:

- **Generic consumables have the potential to cause damage to the printer, leading to interference in normal operation, and SIIT reserves the right to void the warranty if any issue is deemed by SIIT to be caused in part by the use of non-SIIT inks. SIIT highly recommends you to use SIIT standard inks only in the printer.**
- **When using an re-filled or generic ink cartridge for any single color, specified ink cartridges used for other colors are also regarded as unspecified.**
- **The printed image quality may be lower than that achieved by using specified consumables.**
- **The printer cannot correctly recognize the remaining ink quantity. In this case, the quantity is displayed as "???%".**

To use a re-filled ink cartridge

Before conducting the following operations, read [When generic consumables are used] carefully.
To replace the ink cartridge, refer to P.2-46 [Ink cartridge replacement].

1 The printer recognizes an empty ink cartridge and displays the message.

XX : Ink name

K : Black	C : Cyan
M : Magenta	Y : Yellow
Lm:Light magenta	Lc :Light cyan

2 Press the ⌄ key and the CANCEL key at the same time until the message changes.

3 The guidance message is displayed.

SEE CHAPTER 6
IN USER'S GUIDE

4 Refer to the procedures described in the next items.

To use an generic ink cartridge

Before conducting the following operations, read **P.6-3 [When generic consumables are used]** carefully.
To replace the ink cartridge, refer to **P.2-46 [Ink cartridge replacement].**

1 **The guidance message is displayed.**

```
SEE CHAPTER 6
IN USER'S GUIDE
```

2 **Press CANCEL to cancel. Press OK to continue.**

```
ACCEPT:OK
REJECT:CANCEL
```

3 **Choose whether to agree to the printer warranty.**

Press CANCEL to cancel.
Press OK to continue.

```
SEE WARRANTY
CONDITIONS CONT?
```

4 **Choose whether to agree to the safety issues.**

Press CANCEL to cancel.
Press OK to continue.

```
SEE SAFETY
CONDITIONS CONT?
```

5 **The guidance message for final confirmation is displayed.**

```
CONFIRM NON-SII [ ]
        REPLACE [ ]
```

Choose the item using ^ and v keys, and press the MENU key and the OK key at the same time until the display changes.

When [CONFIRM NON-SII] is chosen, the printer warranty and safety issues described above are deemed to be approved, and the use of generic ink cartridges becomes available.

When [REPLACE] is chosen, the display shows the message for normal ink cartridge replacement.

Cleaning liquid

Generic cleaning liquid can be used, but requires some operations in the same way as using generic ink.

However, generic cleaning liquid have the potential to cause damage to the printer, leading to interference in normal operation, and SIIT reserves the right to void the warranty if any issue is deemed by SIIT to be caused in part by the use of non-SIIT cleaning liquid. SIIT highly recommends you to use SIIT standard cleaning liquid only in the printer.

Appendix

This section contains basic specifications, options and consumables for the printer.

(Content in this section)

Basic Specification A-2
Options / Consumables A-3

Basic specifications

Printer Specifications

■ Basic printer specifications

Item	Specification / Function
Recording method	Piezo-type color ink-jet printing
Resolution	720 dpi × 720 dpi
Paper feed/delivery direction	Rear paper supply, Front paper delivery
Paper type	Vinyl chloride (PVC), Tarpaulin, Coated paper
Paper width	Maximum 64 inch
Ink cartridge	General solvent ink Six colors (black, cyan, magenta, yellow, light magenta, light cyan) each 500 ml ink bottles
Noise	Standby : 45 dB(A) or less Operating : 65 dB(A) or less (Continuous sound)
Heat output	4860000J / H or less
Maximum print guaranteed range	Area excluding top, bottom margines (5 mm) and right and left margins (5 mm) (When using the paper edge guard, right and left margins will be 10 mm.)
Power supply voltage	AC 100-127 V / 220-240 V
Frequency	50/60 Hz + / – 1 Hz
Power consumption	1350 W or less (at printer operating)
External dimensions	2830 mm (111 inches)(W) × 830 mm (32.7 inches)(D) × 1255 mm (49.4 inches)(H) + / – 10 mm (0.4 inches)
Weight	230 kg (507.1 lbs) +/- 3 kg (6.6 lbs.) or less (including the take-up reel unit, excluding the blower unit, paper roll and ink)
Operating temperature/ humidity range	15 to 30 °C (60 to 86 °F) / 30 % to 70 % RH (No condensing) (When the operating temperature is less than 20 °C (68 °F), the printing speed will slow down.)
Non-operating temperature/humidity range	5 to 35 °C (40 to 95 °F) / 10 % to 80 % RH or less (No condensing)
Installation space	3650 mm (144 inches)(W) × 3830 mm (150 inches)(D) × 1800 mm (71inches)(H)

Options / Consumables

Options

■ Options

Name	Item number	Quantity	Remarks
Exhaust Attachment	IP-265	1 set	This flange is used to attach an exhaust duct to the printer.
2 inch Flange	IP-152	1 set	This flange is used to load roll media with a 2-inch core.
3 inch Flange	IP-151	1 set	This flange is used to load roll media with a 3-inch core.
Blower unit	IP-182	1 set	This unit dries ink by sending air to the media.

Consumables

■ Consumables

(Ink)

Name	Item number	Quantity	Remarks
Ink cartridge / Yellow	IP5-201 or IP5-701	1 / carton	500 ml
Ink cartridge / Magenta	IP5-202 or IP5-702	1 / carton	500 ml
Ink cartridge / Cyan	IP5-203 or IP5-703	1 / carton	500 ml
Ink cartridge / Black	IP5-204 or IP5-704	1 / carton	500 ml
Ink cartridge / Light cyan	IP5-205 or IP5-705	1 / carton	500 ml
Ink cartridge / Light magenta	IP5-206 or IP5-706	1 / carton	500 ml
Waste ink bottle	IP5-139 or IP5-109	1 piece	

(Maintenance/Cleaning Liquid)

Name	Item number	Quantity	Remarks
Storage liquid cartridge set	IP5-107 or IP5-713	1 set	Storage Liquid Cartridge : 6
Cleaning liquid cartridge set	IP5-138 or IP5-714	1 set	Cleaning Liquid Cartridge : 6
Daily maintenance kit	IP5-230 or IP5-710	1 piece	*1
Cap cleaning liquid	IP5-136	1 piece	300 ml / 1 pc
Wiper cleaning liquid set	IP5-231 or IP5-712	3 pieces	200 ml / 1 pc
Cap cleaning stick	IP5-120	1 piece	with a Cap cleaning Roller
Cap cleaning roller set	IP5-147	30 pieces	
Cleaning swab	IP6-147	300 pieces	
Wiper blade	IP5-122	2 pieces	
Wiper sponge	IP5-123	1 piece	
Media cutter blade	IP5-124	1 piece	

*1: Cap cleaning liquid: 300 ml<1>, Wiper cleaning liquid :200 ml<1>, Cleaning swab<10>, Cap cleaning roller<30>, Wiper blade<1>, Cap cleaning stick (with a Cap cleaning Roller)<1>, Tweezers<1>